DOCUMENT RESUME

ED 134 631 UD 016 642

TITLE	Evaluation of Project Components: 1973-74, Maui District Office.
INSTITUTION	Hawaii Univ., Honolulu. Social Welfare Development and Research Center.
REPORT NO	SWDRC-R-133
PUB DATE	Jul 74
NOTE	108p.
EDRS PRICE	MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS	Elementary Secondary Education; *Evaluation Methods; *Federal Programs; Preschool Programs; *Program Content; Program Descriptions; Program Development; *Program Effectiveness; *Program Evaluation; Reading Programs
IDENTIFIERS	*Elementary Secondary Education Act Title I; ESEA Title I; *Hawaii (Maui County)

ABSTRACT

The Elementary and Secondary (ESEA) Title I project components for Hawaii's Maui District are evaluated in this document. The first section reviews the following: the reading resource rooms, the preschools, and the measurement of academic gain as shown by the Peabody Individual Achievement Test. The second section presents a school-by-school examination of each project, as well as data tables relating to individual projects. It also presents the pre- and post-test results of the Peabody. The third section provides the assessment of various components of the Maui District ESEA Title I projects in alphabetical order of the schools/projects. Each project component is evaluated on the basis of the given original and revised project objectives. Recommendations are made which focus on the following areas: pupil eligibility, selection, and identity; standardizing achievement measuring instruments; leisure and enrichment readings; teacher effectiveness; motivation and learning theory; peer tutoring; preschool; and parent involvement. It is concluded that projects during the 1973-74 academic year are more organized, more effective, and of more help to the pupils than they were during the 1972-73 academic year. (Author/AM)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED134631

1973-74 EVALUATION OF PROJECT COMPONENTS

ELEMENTARY & SECONDARY EDUCATION ACT

TITLE I - MAUI DISTRICT

Principals and Instructors
Participating Schools, Maui District
(refer to Appendix A)

Compensatory Education Section
DEPARTMENT OF EDUCATION
STATE OF HAWAII
Superintendent - Teichiro Hirata

MAUI DISTRICT
District Superintendent - Andy Nii
Curriculum Specialist - Masami Fukuoka

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

Evaluation Report Prepared by:

SOCIAL WELFARE DEVELOPMENT & RESEARCH CENTER
School of Social Work
University of Hawaii

Jack T. Nagoshi - Director
Robert T. Omura - Ass't. Director & Program Consultant
Dr. Clifford R. O'Donnell - Researcher
David C. Swanson - Evaluation Specialist

UD 016642

PREFACE

Evaluation of the Elementary and Secondary Education Act (ESEA) Title I programs of Maui District, 1973-74, was provided by the Social Welfare Development & Research Center (SWDRC), of the University of Hawaii, Manoa Campus. This report was prepared and submitted in accordance with the Memorandum of Agreement between the State of Hawaii Department of Education and the SWDRC. A progress report of Title I programs, presented at mid-year, preceded this final Evaluation of Project Components.

The Social Welfare Development & Research Center is a University of Hawaii public service organization. While its work focuses upon delinquency prevention, program consultation, personnel training, and evaluation, the Center also introduces new approaches and techniques to a variety of human service agencies in this State. Its primary objective is to help community organizations, public and private, to establish the most effective and alternative ways to prevent and treat the socially maladaptive behaviors of Hawaii's youth. A fundamental goal of the Center's operations is to obtain and disseminate new knowledge of potential relevance to public agencies concerned with the progressive educational development of children. In addition to training and program consultation, evaluation and research are essential elements of the Center's operating model. Program evaluations are conducted for the purpose of seeking improvements to current efforts and to propose alternative solutions for greater efficiency. Research efforts are aimed at assessing the many variables contributing to the effectiveness of approaches and to seek modifications to current approaches based upon analysis of objective data.

This final evaluation report for 1973-74 is designed around a developmental approach. To fully understand any segment of this report requires that *the entire evaluation be read from beginning to end*, with no one portion being independent of any others. The narrative, analysis of data, and statistical interpretations are presented in an orderly, unambiguous, and straightforward manner. No prior knowledge of statistical measurements, tests, or project components is necessary for the reader to understand this report. Following the explanation of data and a school-by-school examination of each program are some general recommendations concerning future program development. A careful reading of the complete report, however, is essential before the significance of the recommendations and general conclusions can be realized.

The purpose of this report is not to make a blanket judgment - either good or bad - of any program, but to ascertain what causal relationships may exist between the pupils' educational success and their classroom environment. While the report presents an appraisal of data from throughout Maui District, *the intent was not to compare and contrast one program with another*. Such comparative analysis would be both impractical and unwarranted, for each program functioned within its unique geographical area and served its own specially selected pupils. The objective is not to uncover the projects' past mistakes, but to help Title I educators gain from the lessons of hindsight, an ability to foresee new approaches and apply these with a broader understanding.

Not unlike pre- and post-testing, this report is presented to indicate the progress which has already been achieved, as well as the potential for future development which lies ahead. *Evaluation of Project Components* was written to identify the extent of educational achievement which occurred and to specify what influences upon the children encouraged the learning behavior to arise. As this knowledge develops, more effective and beneficial approaches to education become possible.

It is apparent that the personnel of Maui school district have made a dedicated effort to advance the development and quality of educational services offered to Title I children. The sincerity of these professional educators, their concern for the basic educational needs of pupils, and their willingness to work with new and innovative approaches for the benefit of the children they serve are all commendable. The personal integrity and concern for program development which the Maui District personnel have shown are reflected in the fact that a third party evaluation of Title I projects was requested. This is a sound and justified decision which indicates objective insight and consideration for future program implementation. Research has shown that self-evaluation by program implementors soon results in subjective and laudatory appraisal that has little basis in fact and no significant effect toward further program innovation.

We were very impressed throughout this past academic year with the evident dedication, motivation, and sincerity shown by Title I personnel in the eleven ESEA Title I schools of Maui District. Cooperation and active support of evaluation procedures were offered to the SWDRC from each school's Title I personnel.

This report was initially drafted by David C. Swanson, SWDRC Evaluation Specialist, under the supervision and direction of Robert T. Omura, Assistant Director and principal program consultant to the schools. Selected members of the SWDRC staff also assisted with data analysis and participated in the formulation of recommendations.

Jack T. Nagoshi, Director
Social Welfare Development & Research Center
University of Hawaii, Manoa Campus

TABLE OF CONTENTS

Page

PREFACE 1

EVALUATION 1

SWDRC ACTIVITIES 4

ESEA TITLE I PROJECT COMPONENTS 7
    Reading Resource Rooms 7
    Preschools 8
    Measurement of Academic Gain: PIAT 11

DATA PRESENTATION & EXPLANATION OF TABLES 15
    Pre- and Post-Test Results of PIAT 17
    Average Monthly Gains 21
    Rank Order of Gains by Projects & Grade Levels 25
    Average Gain During Intervention 27
    Achievement of Criterion 30
    Estimates for Improvement in Behavior 32
    Pupil Attendance Record 35
    Leisure & Enrichment Reading 37
    Preschools: Test of Expressive Language 39
    Preschools: Checklist of Basic Skills 40

ASSESSMENT OF PROGRAM 43
    Objectives 43
    Haiku School 44
    Hana High & Elementary Schools 47
    Kaunakakai Elementary School 49
    Kihei School 52
    Kilohana Elementary School 55
    Kula School 61
    Lanai High & Elementary Schools. 64
    Paia School 66
    Puunene School 69
    Waihee School 71
    Wailuku Elementary School 74

CONCLUSION & RECOMMENDATIONS 78
    Pupil Eligibility, Selection & Identity 79
    Standardizing Achievement Measuring Instruments 81
    Leisure & Enrichment Reading 83
    Teacher Effectiveness: Experience & Training 84
    Motivation & Learning Theory 85
    Peer Tutoring: A Teaching Strategy 87
    Preschool Focus 88
    Parent Involvement 89
    Outcomes of Previous Recommendations 90

APPENDIX

EVALUATION

As ESEA Title I programs are funded by the federal government, these programs are required to meet the criterion of evaluation. The connotation behind the word "evaluation" often - but erroneously - suggests to the teacher a threatening or awkward situation, that of being told how and how not to teach. This uncomfortable situation which the teacher experiences is compounded by the social expectation that the teacher already knows, or should know, all there is to know about teaching. Although such anxiety on the teacher's part is not jusitified by fact, the response is often "But do we really have to *prove* everything with facts and figures?" The answer, certainly, is no. It is self-evident that a classroom with appropriate teaching devices and sufficient instructional materials is better than one without any. It is self-evident that an organized classroom where every learner is actively engaged in meaningful activity is better than a noisy and disorganized one. Yet the direction and progressive success of pupils and classroom activities, in most cases, must be revealed through facts which are not so clearly self-evident.

Evaluation is not an analytical process or technical procedure of *proving* anything. It is not abstract, impersonal, or automatic, for such a process would constitute a mere academic exercise. There is no secret or mathematical formula which, if plugged into a classroom, could produce irrefutable proof that the children were truly learning.

Evaluation consists of assessing the needs of students and teacher, observing classroom activities, recommending alternatives, and carefully examining what actually takes place. The purpose of evaluation is not to prove, but to improve. The evaluation procedure requires measurement of academic gains and those characteristics frequently associated with academic gains. Through accurate measurement the observations and assessments become more significant and the recommendations more viable. Statistical data gathered for evaluation isn't used as proof, but as a reliable indicator of the extent and direction of program success. Such measurement is used to suggest more effective approaches to greater program implementation. When achievement occurs in the classroom it can be measured and associated with the classroom environment which influenced pupil behavior and produced achievement. From an analysis of the success rate and the classroom environment, evaluation is able to offer reasonable recommendations: listening posts are more effective when teacher attention needs to be dispersed; motivated pupils tend to work longer and harder than unmotivated ones; children achieve more when their parents encourage them.

To determine reliable data it must be empirical, objective, quantitative, and behavioral. To measure a learned behavior it must first be observable, and secondly, counted. Evaluation must not be based upon opinion, bias, or subjectivity, for the recommendations arising from them would be of very limited value. Data must be systematically gathered, carefully examined, and interpreted in light of the year's ongoing activity within each classroom. From this research arises the basis of evaluation, and through evaluation new knowledge is gained. With this increased understanding new techniques and approaches are recommended, alternative procedures and materials are suggested, and innovative methodology is introduced. To examine various aspects of new information gained through recent educational research, it is suggested that the SWDRC 1972-73 Evaluation of Project Components be reviewed. Special attention should be given to the Introduction (pp. 1 - 7), An Empirical Instructional Model for the Remedial Education Process (pp. 8 - 13), Parental Involvement (pp. 87 - 92), and Introduction to Remedial Language Arts/Reading (pp. 30 - 33).

Evaluation assessments are made by determining a) how effective the program is, b) which variables contributed in what degree to the effectiveness of the program, and c) what modifications in approaches and techniques would be likely to increase effectiveness. Each of these questions must be answered for evaluation to be complete. As the solutions to these questions are found, greater understanding of the problems and programs designed to alleviate them will be known.

SWDRC ACTIVITIES

The Social Welfare Development & Research Center initiated evaluation services to the eleven Maui District ESEA Title I projects at the beginning of the 1973-74 academic year. In addition to a cover letter introducing the SWDRC to project teachers, each program received a set of specially designed assessment forms for the recording of data. Information requested by the SWDRC included data from two preschool tests, estimates of pupil behavior, the number of books read by pupils, attendance rates, and scores from all five subtests of the Peabody Individual Achievement Test. Similar assessment forms were again issued to each project in April for the recording of post-data, with the change scores serving as the fundamental basis for statistical evaluation. This standardized procedure of requesting the same information (at the same time and on identical assessment forms) from similar projects provided a systematic and precise measurement of program objectives.

During the first two months of the academic year a number of objectives were revised. This was done by the District Office, school principals, and project teachers, in consultation with the SWDRC. This revision provided greater clarity, understanding, and accuracy in measuring program achievement. The alterations made in program objectives reduced the subjectivity and ambiguity which was present, replacing this with more behavioral and quantitative specifications.

From September, 1973, through May, 1974, the SWDRC visited each project at least four times for all schools except Hana and Lanai, with more numerous visits made to those programs which required further assistance. While all projects were observed and offered consultation from the SWDRC, priority was given to those teachers who requested additional help. In all cases, ideas for improvement, greater effectiveness, and innovation were offered. Data were collected and examined for accuracy, observations were carefully made, and all questions were answered.

The Center's activities included observing each classroom's arrangement and activities, instructional materials and machines, the techniques used, and testing procedures. Discussions with educational assistants, project teachers, and principals focused on the behavioral objectives, Title I guidelines, selection of pupils, and program development. Special attention was given to immediate problems arising within the classroom and to the channels of communication existing within the school. In cooperation with the Maui District Office group meetings of the Title I teachers on Maui were arranged and conducted for better dissemination of information between projects. Throughout the academic year the SWDRC offered individual recommendations and suggestions for improvement to each project.

In an attempt to assess the impact of the ESEA Title I projects within the respective schools and to further ascertain the degree of parental involvement, a number of questionnaires were prepared and distributed. Specific surveys among principals were taken once during the fall - relating to general information about the school, its program for children with special needs and information about parental involvement and communication. A second survey requesting other information was made during the spring. A questionnaire especially designed for parents identified with the school through the parents and teachers association (PTA), the Title I Parent Advisory Council (PAC) and other related organizations, was mailed out at the mid-year point.

Questions relating to parent-teacher and teacher-teacher communications were prepared in two specific questionnaires sent to the project teachers and referring regular classroom teachers of the respective schools.

Although the results of the surveys were generally subjective in nature and not too reliable for objective evaluations, the responses did present interesting sidelights to the effect of Title I programs within the schools.

The observations and recommendations were made in order that more effective programs would emerge in the coming months and years. The long-range development of efficient and effective remedial programs was the aim of the evaluation services provided to these Maui District Title I programs.

ESEA TITLE I PROJECT COMPONENTS

READING RESOURCE ROOMS

Maui District supported eight ESEA Title I Reading Resource Rooms during the 1973-74 academic year. While six of these projects were in central Maui and two on Molokai, their goals were similar: to effectively instruct under-achieving pupils in the areas of language arts and reading improvement. Reading recognition and reading comprehension, and listening and oral skills were emphasized.

With pupils selected for the programs first by their low test scores on standardized reading tests and secondly by teacher referral, each project was designed to offer pupils supplemental help which they could not receive from their regularly scheduled classes. Special instructional materials and devices were available in most classrooms. Only one project utilized the services of an educational assistant. All projects, to varying degrees, developed an organized and generally efficient use of classroom space. Motivational techniques, such as positive reinforcement - tangible and social - and free time activities, were used in the classroom management of all projects. In a few cases, however, this approach was only touched upon, while in other classrooms the motivating factor was a well developed and integral part of the pupils' daily activities.

The goals of all reading resource rooms were generally similar. The primary objective was that the pupils would show a learning rate greater than .1 per month in reading recognition and reading comprehension. Other objectives involved the pupils' attendance rates, behaviors, and the number of books which they read. These objectives were met, at differing levels, by most projects.

The greatest advantage to the pupils of reading resource rooms is that each classroom was relatively self-contained, with its own special materials, machines, techniques, innovative approaches, and teacher. This arrangement encouraged a more specific classroom organization, close supervision, direct teacher-to-pupil contact on a daily basis, and, most importantly, provided the time and opportunity for individualized instruction to occur. Through these reading resource rooms it was possible to provide each child with individual diagnosis, prescription, instruction, and evaluation on a daily or weekly basis.

Identified and selected pupils reported for specific amounts of time each day and received remedial instruction in the basic skills of reading. Depending on the number of personnel within the Reading Resource Room, i.e., project teacher plus an educational assistant (in one project), the average attendance per instructional period ranged from four to ten pupils at a time.

Kilohana School (Molokai), in addition to remedial reading services, provided counseling and guidance services through a full time project counselor. Individual guidance services were extended to identified pupils of the school who were eligible for ESEA Title I participation.

PRESCHOOLS

Three preschool programs were conducted in Maui District during the past academic year. The programs were on Lanai, at Hana and at Puunene, with each designed to serve twenty preschoolers. The parents of these sixty children all requested that their children be allowed to participate in the program. As available standardized tests for the purpose of selection criteria are not sufficiently reliable when applied to three and four year old youngsters, much of the basis for final selection was subjective in nature. Individual pupil needs and the home environment, however, were carefully taken into consideration during the selection procedure.

The preschool programs were organized and designed around the concept of providing these children the opportunity to gain the necessary social and academic abilities required in kindergarten and the early elementary grades. Such abilities as socio-emotional, psychomotor, cognitive, and language development were the focus for these preschool projects. The goals of preschool education and child development are to a) promote and enhance the social and personal development of the child, b) instruct the child in the initial academic disciplines necessary for his progressive success throughout the elementary grades, c) provide the nutrition, recreation, social interaction, and supervision the child requires and cannot find within his home environment, and d) supply the necessary situations through which his natural exploratory activity may readily occur.

Each preschool classroom was comfortable, clean, well decorated with art work and pictures, and supplied with sufficient instructional materials. All children engaged in play activities, physical exercises, nap time, lunch, academic work, and social interaction each day. The significance of the personal and social experiences which lead to childhood maturity were, in all likelihood, equal to the individual's growth in academic ability. In all three programs, however, the children improved faster in the areas of colors, numbers, shapes, and locomotive skills, and less quickly in the more formal academic areas such as the identification and naming of upper and lower alphabets and following directions.

As most of the preschool objectives (as stated in the project proposal) are highly subjective in nature and do not lend themselves to statistical evaluation, no precise interpretation can be made regarding their attainment.

All sixty pupils, nevertheless, did meet and surpass those objectives which are subject to accurate measurement. The pre- and post-test data generally indicate that all objectives were probably met, for the success of these programs and the achievement of these pupils was remarkably high.

MEASUREMENT OF ACADEMIC GAIN:

Peabody Individual Achievement Test*

The Peabody Individual Achievement Test (PIAT) was administered to each Title I pupil as a pre- and post-test, in September and May respectively. The changes (increases or decreases) between these two sets of scores presents an overview of the scholastic attainment of the pupils. Administration of the PIAT provides a wide-range measure of achievement in the areas of mathematics, reading, spelling, and general information.

The mathematics subtest measures the pupil's ability to apply mathematical knowledge to the solution of practical computational problems. This subtest does not require writing or oral responses and, as the first subtest presented, enables the tester to establish a good rapport with the pupils. The reading recognition subtest measures the pupil's ability to translate sequences of printed alphabetic symbols which form words into speech sounds that can be understood by others as words.

The reading comprehension subtest measures the individual's ability to derive meaning from printed words. The format includes a series of sentences of increasing difficulty from which the pupil first reads a passage and then selects from four illustrations the one that best conveys the meaning of the passage. The spelling subtest measures the pupil's ability to recognize correctly spelled words. To do this the pupil selects, in response to verbal cues provided by the tester, the correct one of four similarly printed words with slight variations in spelling. The fifth subtest, general information, measures the extent to which the pupil has acquired knowledge relating to himself and his environment. This subtest consists of open-ended questions that relate to general encyclopedic knowledge.

---

*Dunn, Lloyd M., & Markwardt, Frederick C. Jr., Peabody Individual Achievement Test, American Guidance Service, Inc., Circle Pines, Minnesota, 55014, 1970.

The Peabody Individual Achievement Test was chosen as the standard measuring instrument for use with Title I projects because of its numerous characteristics which enhance its utility as a measure of scholastic achievement. First, the PIAT was designed as an individually-administered test. As group tests are able to measure only a relatively narrow range of grade levels, or are diagnostic instruments in a specific subject matter, the PIAT is not prone to these limitations. The test enables the examiner to establish a personal relationship with the pupil that helps to elicit a more optimal performance from him, especially when the pupil is less motivated toward school and academic achievement. The PIAT, as an individual test, also allows closer monitoring of pupil behavior, encourages less guesswork, and permits more accurate measurement of the achievement exhibited by immature and under-achieving pupils.

The PIAT is a wide-range instrument extending from kindergarten through high school, with the items arranged in order of difficulty. This feature makes it possible to locate quickly, and administer only, those parts of the test that are within the critical range of difficulty for the pupils. With this attribute, some of the major faults of group tests are avoided: boring brighter students with items which are too easy for them, and frustrating slower ones with items beyond their abilities.

A third advantage of the PIAT is that it was designed to be a screening test which could be quickly administered and scored, typically taking only thirty to forty minutes. No special lead pencils, computer programming, or sets of coded scoring stencils are necessary. The pupil's successful progress through the test is scored at the same time he is being examined.

The PIAT is an untimed, power test. An emphasis on speed would be a considerable handicap for most underachieving or disadvantaged Title I pupils. The test items were not selected from specific techniques or concepts but were balanced across traditional, modern, and functional aspects of the general curricula. This important characteristic of the PIAT minimizes the bias resulting from the particular instructional approach to which the pupil was exposed. Rather, the PIAT test items measure functional knowledge or abilities that are widely-expected educational outcomes.

Of particular benefit to Title I projects is that the PIAT was designed to be most sensitive at the lower grade levels and to decrease gradually in sensitivity with advancing grades. This was done with the belief that the PIAT would be used more often with students whose achievement is at the lower level of the test range.

A seventh valuable aspect of the test is that demonstration and training exercises are included to introduce each subtest to the pupil, thus insuring some initially successful experiences for him. These exercises are also used to teach the pupil the type of responses which are expected. Completely objective scoring, which is easily accomplished while the test is being administered, is built into three of the five subtests which are in multiple-choice format, and precise standards are provided on the other two to reduce scoring variability.

Of major significance is that the PIAT subtests are designed so that no academic skills are required other than those specifically being measured. The mathematics and general information subtests, for example, are made fairer for the pupil with reading difficulties in that no reading is required. Furthermore, the pupil does no writing on any subtest since this often inhibits his performance and motivation. The PIAT format, illustrations, and content were also specially selected to hold the interest of pupils of both sexes, from a wide variety of ages, and from differing cultural backgrounds.

Most important for its accurate interpretation, the PIAT was carefully standardized nationally on a sample of 3,000 pupils in the mainstream of public education. The sample of pupils upon which the norms are based were chosen in proportion to the population of school-age children and based on the 1967 projected data from the Bureau of the Census. The standardization, conducted in 1969, accounted for differences of sex, age, race, socio-economic status, and urban, suburban, and rural communities. All test administrators received extensive training on testing and scoring procedures from the American Guidance Service, Inc.

The twelfth distinctive aspect of this test is that extensive formal preparation is not required for its administration. The PIAT can be administered by any professional person interested in measuring the academic achievement of pupils. Furthermore, the testing procedures are sufficiently objective so that non-professional assistants, under supervision, may also administer the PIAT. Such advantages as these make the Peabody Individual Achievement Test a sound and justified choice for use in evaluating the scholastic attainment of Title I pupils in Maui District.

DATA PRESENTATION & EXPLANATION OF TABLES

A general understanding of the statistical data is required before any portion of it can be applied to specific projects, and a concise explanation of these tables is provided. This description of the tabled data does not discuss individual programs or their specific achievement rates, but interprets how the data was used for this purpose. A school-by-school examination of each project, as well as data tables relating to individual projects, are presented immediately following this section of the report.

As with any test, raw scores fluctuate according to the number of test items and the ability of the individuals being tested. Raw scores, by themselves, cannot be meaningfully interpreted. The Peabody Individual Achievement Test provides four types of scores which were derived from the pupils' raw scores during the time of test standardization. These derived scores are 1) grade equivalents, 2) age equivalents, 3) percentile ranks, and 4) standard scores.

The SWDRC elected to use the first index of measurement, the grade equivalent scores, as these are the most familiar to teachers, more readily understood by educators, and least subject to statistical misinterpretation.* While using grade equivalent scores as the basis of statistical evaluation, the tabled data further minimize possible misunderstanding by including only the gains achieved. The actual grade levels the pupils were in and their grade equivalent scores achieved on pre-testing would, like raw scores, fluctuate among projects and therefore be more difficult to compare and understand. It cannot be determined, in other words, whether a fourth grader with a 3.8 grade equivalent score achieved more or less than a third grader with a 2.1 grade equivalent score. Only the difference between the pre- and post-test scores (i.e., gains) can give this information.

---

*Teachers are cautioned, however, not to use the PIAT test data as a diagnostic test. The derived scores indicate the most appropriate grade level at which the pupil would function as an average student.

PRE- AND POST-TEST RESULTS OF PIAT

The data presented on Table 1 indicate only indirectly where the pupils were at the beginning of the year and where they were at its end, with the significance of evaluation based on the gains or losses (±) attained during the year. The data, presented in subsequent tables, of grade equivalent scores have therefore been refined into average monthly gains. The average gain per month was established by subtracting the pre-test score from the post-test score, and dividing this by the number of months between pre- and post-testing.

All test data from the PIAT are presented in average monthly gains in grade equivalent scores. The primary objective of most projects was for the pupils to achieve an average grade equivalent score greater than .1 per month. Achieving less than .1 per month would suggest that the pupils were falling further behind their non-Title I peers, and a .1 per month rate of achievement would indicate they were falling no further behind than where they were at the beginning of the academic year. A fifth grader's grade equivalent scores of 3.7 in September and 4.7 in May would imply that, after a year's work, he is still over one year behind the typical pupil in his grade level. For remediation to be successful the academic gains must be greater than those made by other pupils.

Another way of understanding the average monthly gains in reference to the .1+ per month objective is to view the data as month-per-month gains. A project's pupils who achieved a .13 average monthly gain in effect achieved one and three-tenths months for each month (or one-tenth) of the academic year, thus gaining .03 per month in addition to the .1 per month required of the grade level as a whole. In this case, the Title I project whose average monthly gain was .13 attained an achievement rate of one year in maintaining the pupils ability commensurate with that of other pupil's in his grade, and three-tenths of a year (.03 X ten) in remediation. At the end of the year the pupils were, on an average, three-tenths of a grade level closer to functioning "on average" with non-Title I pupils. This theoretical group of pupils, therefore, were not only keeping up with other pupils but decreasing the gap between their academic ability and that of other pupils.

While grade equivalent scores are relatively easy to understand, they should not be accepted as proof or absolute fact. Testing error by the test administrator may result in scores which are neither accurate nor reasonable. The standard error of measurement (reliability) and standard error of estimate (validity) of the test may also contribute to scores which are not "true" or perfect. Thus, all derived scores, such as grade equivalent scores, are approximations of the true score. When an individual attains a 2.3 grade equivalent score it is not proof that he is functioning at exactly that level. The score represents ceiling achievement or the pupil's upper limit. An independent functioning level may be within a range of half a year to one full year below the given score he is probably able to function. It is for this reason that PIAT scores, like all achievement test data, should not be used for diagnosis or prescription of individual work.

By averaging many scores, however, the range of probable true scores for the group as a whole is considerably reduced in size. (Although no correction for testing error by the administrator is possible.) More reliability can therefore be placed upon the tabled data than would be possible when examining just one pupil's score, for while his individual score would be likely to change somewhat upon immediate retesting, the group's average score would not be equally subject to the small variations within the group. The differences between each pupil's first and second set of scores would tend to balance out and retain the same, or nearly the same, group score.

The effect of averaging scores has the inherent drawback of using numbers that must be rounded off. For some data this may constitute losing information, while for another case the fine measurement of a hundredth or thousandths place would not be necessary. Average monthly gains which are within two hundreds of a point to one another are not significantly different, and may be due to chance. Such differences should not be accepted as precise fact, but as an indication of the probable academic success that was attained.

TABLE 1

READING RESOURCE ROOMS

Pre-Post Results: Peabody Individual Achievement Test

SCHOOL	NUMBER OF PUPILS		MATHEMATICS			READING RECOGNITION			READING COMPREHENSICN			SPELLING			GENERAL INFORMATION			TOTAL SCORE		
	Pre	Post	Pre	Post	±	Pre	Post	±	Pre	Post	±	Pre	Post	±	Pre	Post	±	Pre	Post	±
Haiku	31	32	2.2	3.2	1.0	2.1	2.9	.8	2.0	2.6	.6	2.3	3.3	1.0	2.4	3.8	1.4	2.2	3.1	.9
Kaunakakai	24	26	1.4	2.0	.6	1.1	1.6	.5	.5	1.4	.9	2.2	1.8	.4	2.0	1.4	-.6	.9	1.7	.8
Kihei	30	24	3.0	4.6	1.6	2.7	4.8	2.1	1.3	4.4	3.1	2.2	4.0	1.8	2.4	4.6	2.2	2.3	4.5	2.2
Kilohana	33	40	2.8	3.9	1.1	2.1	3.0	.9	1.8	2.7	.9	2.1	2.6	.5	2.2	3.2	1.0	2.1	2.8	.7
Kula	28	27	2.0	3.5	1.5	1.5	2.9	1.4	1.0	2.6	1.6	1.5	2.6	1.1	1.5	3.0	1.5	1.5	2.8	1.3
Paia	29	29	1.2	1.8	.6	1.6	2.4	.8	1.0	2.4	1.4	1.6	2.5	.9	.1	1.6	1.5	1.2	2.1	.9
Waihee	31	30	2.4	3.2	.8	2.2	3.2	1.0	1.8	3.0	1.2	2.2	3.0	.8	1.9	3.0	1.1	2.1	3.0	.9
Wailuku	53	46	1.9	3.2	1.3	1.9	3.9	2.0	1.2	3.4	2.2	1.8	3.4	1.6	1.5	3.1	1.6	1.7	3.3	1.6
DISTRICT AVERAGE	32.4	31.7	2.1	3.2	1.1	1.9	3.1	1.2	1.3	2.8	1.5	2.0	2.9	1.0	1.8	3.0	1.2	1.8	2.9	1.1

AVERAGE MONTHLY GAINS

The first table of data presents the pre- and post-test results and the gain achieved during the year by each reading resource room. Immediately to the right of the schools is indicated the number of pupils, followed by the scores for each of the five PIAT subtests. Table 2 also lists the schools in alphabetical order, but indicates the average monthly gain in grade equivalent score that was achieved. In all except one of these eight projects a few pupils moved out of the local school area or, for various reasons, left the Title I program during the school year.

The pupils who left and the newer pupils who were admitted to the programs did not receive both pre- and post-tests. In addition, some pupils were not post-tested due to absence from school during the last week of testing. According to the projected enrollment of all Title I projects, 25 pupils (11%) were not tested at the beginning and end of the year.

That some pupils were not fully tested is an important factor when comparing the projects' Total Score monthly gains with the average monthly gains in the last column of Table 3. The Total Score of the PIAT was based on the number of pupils taking the test, and with this number differing between test administration the Total Score was not always equivalent to the average monthly score. The average monthly gain represents the gain achieved by pupils who received both pre- and post-testing.

The graphs depicting the average monthly gains on the five PIAT subtests (see individual project descriptions) show these scores for each program and the Maui District averages. Each project's achievement can be seen in relationship to the average of similar projects, with the achievement of its pupils being above, equal to, or less than the entire District. The overall average does not, however, represent a standard criterion. It is not a goal to reach, nor a measure of program efficiency. A project whose academic achievement was above the average does not necessarily mean the project was more effective than others, and a project whose pupils' achievement fell below the average does not confirm that it was a less effective program. Comparative analysis among projects must be interpreted cautiously, for while one program may have succeeded with fifth grade children and another achieved less with third graders, either one may have initiated the remedial work with less motivated pupils, a smaller budget, poor facilities, lesser parental support, or with pupils further behind in their previous academic achievement. One project averaging less this year may, in following years, achieve more.

Nevertheless, the relationship between each project's gains and the District average does represent the general strengths and weaknesses of project achievement, especially where these gains are relatively large. The larger the gain, as presented on the graphs by the distance from the average, the more confidence can be placed in the assumption that these differences are real and due to actual program effectiveness. Scores which are higher or lower by two-hundredths of a month's gain (equivalent to two-tenths of a year's gain), when compared to the District average, may be considered initially reliable. Differences between subtests, however, must be viewed more cautiously, for the different subject matter tends to be learned faster or slower by children of differing ages.

TABLE 2

READING RESOURCE ROOMS
Average Monthly Gain in Grade Equivalent Scores by School

SCHOOL	Pupils Tested	Math.	Rdg. Rec.	Rdg. Comp.	Spell.	Gen. Info.	Total
Haiku	32	.13	.11	.08	.13	.19	.12
Kaunakakai	21	.06	.05	.09	.04	-.06	.08
Kihei	24	.20	.26	.39	.23	.28	.28
Kilohana	29	.15	.12	.12	.07	.13	.09
Kula	24	.18	.16	.19	.13	.18	.15
Paia	29	.08	.11	.19	.12	.20	.12
Waihee	30	.08	.10	.12	.08	.11	.09
Wailuku	44	.17	.27	.29	.21	.21	.21
DISTRICT AVER.	233 (total)	.13	.15	.18	.13	.16	.14

TABLE 3

READING RESOURCE ROOMS

Average Monthly Gain in Grade Equivalent Scores by Grade Level

SCHOOL	# PUPILS TESTED	GRADE LEVELS									
		K	1	2	3	4	5	6	7	8	9	Average
Haiku	32		.10	.11	.07	.11	.19	.15	.07	.18		.125
Kaunakakai	21		.08	.09	.08	.04	.04	.05				.076
Kihei	24				.15	.21	.26	.33				.249
Kilohana	29			.14	.07	.14	.16	.10				.123
Kula	24	.09	.15	.15	.14	.26	.17	.16				.155
Paia	29		.11	.13	.08	.07						.106
Waihee	30		.14	.05	.08	.09	.09	.14	.11	.11		.100
Wailuku	44		.24	.23	.22							.230
DISTRICT	233 (Total)											.146

RANK ORDER OF GAINS BY PROJECTS & GRADE LEVELS

Table 4A presents the rank order of project components by their average monthly gain achieved. Like all PIAT test data, these gains are based on grade equivalent scores, with the difference between pre- and post-tests being divided by the average number of months (per project) between testing dates.

Table 4, concerning reading resource rooms, indicates the rank order of grade levels according to their respective average monthly gains. No consistency of achievement through grade levels was evident, with this due to the heterogeneous classification of grade levels throughout all eight projects. That is, most projects, whether more or less effective than others, served most grade levels, and the specific grade level gains by one were balanced by those of another.

That pupils in kindergarten, first, seventh and eighth grades achieved lower learning rates does suggest, however, that the youngest and oldest pupils were often unable to benefit as much from the projects as were other children. The individualized instruction and motivating techniques were apparently less effective for these "harder to reach" pupils. The results this year, further, are a reversal of the 1972-1973 outcomes which showed the sixth graders making the least gains. The present result shows that the fifth and sixth graders ranked first and second respectively, indicating significant improvement for this group of target students.

TABLE 4

READING RESOURCE ROOMS

Rank Order of Grade Levels by Average Monthly Gain Achieved

GRADE LEVEL	AVERAGE MONTHLY GAIN
5	.188
6	.171
4	.156
3	.155
2	.144
1	.111
7	.110
8	.110
K	.090

TABLE 4A

Rank Order of Project Components by Average Monthly Gain Achieved

SCHOOL	AVERAGE MONTHLY GAIN
Kihei	.249
Wailuku	.230
Kula	.155
Haiku	.125
Kilohana	.123
Paia	.106
Waihee	.100
Kaunakakai	.076

AVERAGE GAIN DURING INTERVENTION

Among the various tables of PIAT data, and numerous graphs of subtest scores, the most valuable and comprehensive information is revealed in Table 5. First are listed, in alphabetical order, the Title I schools during the past academic year. To the right of each school are the average monthly gains of the pupils in that school's project before the beginning of the academic year. To determine this baseline figure each pupil's pre-test Total Score was divided by the number of months of academic instruction which he had received up to that time. A fourth grade pupil at the September pre-testing would have been in school three years, or thirty months - excluding kindergarten. Achieving a grade equivalent score of 2.0, his average monthly gain, or baseline rate, before the Title I program began would have been .07. Every pupil's baseline rate of learning was established, and averages for each project were recorded.

A similar procedure was used to determine the pupils' average monthly gains during their participation in the Title I project. Each pupil's pre-test Total Score was subtracted from his post-test Total Score, and the difference divided by the number of months (to the nearest half-month) between testing periods. For most projects there was a seven or seven and one-half month interval. These second-column figures show the actual academic gain which was attained by the typical pupil in each project.

Immediately to the right of these numbers is a third set of figures, with these representing the most significant of all PIAT data. This last column in Table 5 shows the increased learning rate of the children for which each Title I project was largely responsible. When considering testing and academic achievement only, these figures provide the most direct means of assessing program effectiveness. The increased rates of learning, which are in addition to the baseline learning rates of the pupils prior to the programs' beginning, indicate the relationship between what the youngsters were achieving before their Title I experience and during their remedial instruction. The greater the increase in learning rate the faster the pupils were achieving an academic ability equal to non-Title I children. Similarly, with higher learning rates the better these children will be able to function within the mainstream of school activities in coming years,and, essentially, the more effective was the Title I program.

The statistical figures of Table 5, as high as they are, represent only the total test score of the PIAT. This average score of the five subtests reflects the necessary and critical emphasis which individualized instruction in remedial reading must have within each school, for a fundamental ability to read is a prerequisite to academic work in general. Since the emphasis within reading resource rooms was placed on reading, the pupils attained their greatest gains on the subtests of reading recognition and reading comprehension. The Total Score, however, was not increased to its .15 average just because the two reading subtests were high, for the pupils also achieved learning rates in mathematics, general information, and spelling which were most frequently higher than their baseline rates. The pupils, whose average gain in reading was 1.7 years, could from their reading improvement better comprehend mathematical problems, understand and absorb more knowledge of their environment, and recognize and recall the correct spelling of more words. The emphasis on reading resulted in an overall improvement throughout the spectrum of academic knowledge and ability.

TABLE 5

READING RESOURCE ROOMS

Pupils' Average Monthly Gain Before & During Their Program Participation

SCHOOL	BEFORE PROGRAM PARTICIPATION	DURING PROGRAM PARTICIPATION	INCREASE
Haiku	.06	.12	.06
Kaunakakai	.05	.09	.04
Kihei	.07	.25	.18
Kilohana	.08	.12	.04
Kula	.07	.15	.08
Paia	.10	.10	0
Waihee	.07	.10	.03
Wailuku	.10	.23	.13
DISTRICT AVERAGE	.08	.15	.07

ACHIEVEMENT OF CRITERION

The last of the tables involving PIAT data from reading resource rooms, Table 6, indicates the percent of pupils in each project whose achievement during the school year was above their baseline rates and, secondly, above .1 average monthly gain. The number of pupils listed is the number who were both pre- and post-tested. These percent figures represent those pupils who were above their baseline rates and average monthly gains. As the individual baselines were nearly always below .1 monthly gain, the percent of pupils surpassing their baseline rates tended to be greater than the percent reaching the objective criteria of .1 per month.

TABLE 6

READING RESOURCE ROOMS

Percent of Pupils Above Baseline Rate & .1 Average Monthly Gain

SCHOOL	NO. OF PUPILS	PERCENT ABOVE BASELINE RATE	PERCENT ABOVE .1 AVERAGE MONTHLY GAIN
Haiku	32	81	59
Kaunakakai	21	71	19
Kihei	24	100	100
Kilohana	29	66	55
Kula	24	92	83
Paia	29	66	59
Waihee	30	77	33
Wailuku	44	98	98
DISTRICT AVERAGE	233(Total)	82	66

ESTIMATES FOR IMPROVEMENT IN BEHAVIOR

Table 7 presents the final results from the Project Teacher Behavioral Estimate Form. The scores, listed by the school of the Title I project, are the average pupil scores per question. A YES response on the estimate form was assigned two points, an UNCERTAIN response one point, and a NO response no points, with an average score per question of 2.0 being the highest possible, and zero being the lowest.

The table immediately following these final results, Table 8, shows the pre-post increases from the estimate form. (For the initial results of these estimates, see Table 6 of the SWDRC Mid-Year Progress Report for 1973-1974.) As the name of the behavioral estimate form implies, this measurement of pupil behavior was a subjective estimate at best. No assumptions regarding its validity or reliability can be made, and no concrete conclusions may be drawn from it.

Nevertheless, a notable aspect shown in the results from Table 8 is that questions two, five, and eight ("Good study habits", "Completion of assigned tasks on time", and "An ability to follow directions accurately") had the greatest increases, while the third question ("Good cooperation with project teacher.") had the least increase of any question. The subjectivity of estimating becomes most obvious with this disparity, for while the pupils increased their work and improved their study habits, they weren't, apparently, doing what the teachers wanted. The low rating of pupil cooperation probably reflects the level of frustration felt by teachers, and has little to do with whether the pupils were actually cooperating or not. That the pupils improved their work and behavior, however, is firmly supported by the evidence of their tested achievements.

TABLE 7

READING RESOURCE ROOMS

Final Results From Project Teacher Behavioral Estimate Form

Average Pupil Score Per Question

SCHOOL	Good social interaction with others.	Good study habits.	Good cooperation with project teachers	Good cooperation with other students.	Completion of assigned tasks on time.	Appropriate behaviors in project class.	Good attention and interest in his work.	An ability to follow directions accurately	AVERAGE
Haiku	2.0	1.5	2.0	2.0	1.5	1.7	1.5	1.7	1.7
Kaunakakai	1.9	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Kihei	1.8	1.6	1.9	2.0	1.8	1.8	1.6	1.6	1.8
Kilohana	2.0	1.3	1.9	1.7	1.7	1.8	1.7	1.6	1.7
Kula	2.0	1.8	2.0	2.0	1.8	2.0	1.8	1.9	1.9
Paia	1.5	.8	2.0	1.6	1.6	2.0	1.8	1.6	1.6
Waihee	2.0	1.9	2.0	2.0	1.9	2.0	1.9	1.8	1.9
Wailuku	1.8	1.1	1.8	1.7	1.2	1.4	1.0	1.0	1.4
DISTRICT AVERAGE	1.9	1.5	2.0	1.9	1.7	1.8	1.7	1.7	1.8

TABLE 8

READING RESOURCE ROOMS

Pre-Post Increases From The Project Teacher Behavioral Estimate Form

Based on Average Pupil Score Per Question

SCHOOL	Good social interaction with others.	Good study habits.	Good cooperation with project teachers.	Good cooperation with other students.	Completion of assigned tasks on time.	Appropriate behavior in project class.	Good attention and interest in his work.	An ability to follow directions accurately.	AVERAGE
Haiku	.1	1.0	0	.1	.7	.4	.4	.8	.4
Kaunakakai	-.1	1.2	.1	0	0	.2	.1	.8	.3
Kihei	-.2	.3	0	.1	.1	-.1	.1	.2	.1
Kilohana	.9	.5	.2	.3	.7	.8	.5	.8	.6
Kula	.2	.1	0	.3	.1	.1	.4	.4	.2
Paia	.2	.6	.4	.3	1.2	1.7	1.4	1.6	.9
Waihee	.3	.7	.1	.2	.7	.7	.6	.9	.5
Wailuku	.2	1.0	.2	.1	1.0	.8	.8	1.0	.6
DISTRICT AVERAGE	.2	.7	.1	.2	.6	.6	.5	.8	.5

PUPIL ATTENDANCE RECORD

Table 9, concerning the pupils' attendance records, readily shows that none of the projects achieved the criterion for improving school attendance. In fact, a number of schools' Title I pupils actually worsened their school attendance as the year progressed. On an overall basis, the total school population of the State annually shows a gradual drop in attendance as the end of the school year approaches and the individual records of ESEA Title I pupils are usually compatible with the general population. Only Kaunakakai, Kula and Waihee Schools maintained a somewhat stable attendance record which is typical of the statewide average for all schools. Kilohana and Wailuku decreased slightly while Kihei and Paia Schools shows approximate decreases of 10-15% between the Fall and Spring attendance counts. Haiku School's drastic reduction from the 78-81% range to 25% was reported to be due to the pupils' illness during the spring months.

TABLE 9

READING RESOURCE ROOMS

Pupil Attendance Record

SCHOOL	AVERAGE PERCENTAGE RATE OF ATTENDANCE			
	October	December	February	April
Haiku	74	78	81	25
Kaunakakai	93	93	91	92
Kihei	84	82	80	69
Kilohana	96	93	91	93
Kula	97	96	94	97
Paia	91	80	83	72
Waihee	94	90	95	92
Wailuku	96	93	82	89
DISTRICT AVERAGE	91	88	87	79

LEISURE & ENRICHMENT READING

The last table of data concerning reading resource rooms presents information regarding the number of books which the pupils read during the first and last two months of the school year. The data shown in Table 10 was not very reliable or a truly accurate measurement of pupil reading improvement. Second only to parental involvement, the measurement of pupil behavior - and especially their reading of books - was the most difficult to establish. Such reading may not only occur at any time, and be a private affair of the individual pupil, but the teacher herself cannot often judge whether the pupil really read the book or not. The teachers' subjective judgment had to be used in estimating what kind of reading occurred (e.g., skimming, recognizing familiar words, or comprehending), and how difficult the book was.

In some cases the number of books read increased sharply, due to greater interest, ability, and motivation by the pupils, and because the books were of equal difficulty. In other projects the number of books read decreased, due to a similar interest, ability, and motivation, and because the books increased in length and difficulty. It can be assumed from the PIAT test results, however, that reading ability improved and that reading content increased in difficulty within each project.

TABLE 10

READING RESOURCE ROOMS

Average Number of Books Read Per Pupil During Academic Year

SCHOOL	NUMBER OF PUPILS	FIRST 2 MOS.	LAST 2 MOS.
Haiku	32	.9	9.8
Kaunakakai	24	5.3	6.0
Kihei	30	4.2	8.8
Kilohana	30	11.5	7.1
Kula	24	5.2	7.9
Waihee	30	.8	2.5
Wailuku	50	7.0	7.2

PRESCHOOLS: TEST OF EXPRESSIVE LANGUAGE

The Test of Expressive Language (TEL)* is a short, easily administered instrument for evaluating the level of expressive language functioning of children. The child is required to respond verbally to a series of graded questions about himself and his immediate environment. The TEL consists of seventy-five items that can be administered in about fifteen minutes to children between three and seven years of age.

The results from this preschool Test of Expressive Language are presented in Table 11. The norm scores are standardized scores derived from the properties of the normal probability curve and preserving the absolute differences between scores. The TEL norm score (z-score) is 100 or a value of zero. The greater the distance (above or below) from "100", the wider the gap from the mean score.

While all three preschools at Hana, Lanai, and Puunene achieved norm scores well above 100, precise assessment of whether they met their objectives was not possible. The norms for the TEL were established for "economically disadvantaged" preschool pupils and the Title I criterion for preschool participants was primarily for the "educationally deprived". Further, a considerable number of the pupils at Lanai and Puunene came from families of foreign-born parents which indicates cultural-language disadvantages inhibiting successes at school.

---

*Crowell, Doris C., Fargo, George A., & Noyes, Mary H., Test of Expressive Language, University of Hawaii, 1969.

PRESCHOOLS: CHECKLIST OF BASIC SKILLS

Table 12 shows the pre-post percent of criterion success achieved by the preschool pupils on the Preschool Checklist for Basic Skills. While increases were significant for all three projects, the Lanai project exhibited slightly greater gains, probably due to the academic orientation of the project teacher. (Note: The new Lanai preschool teacher was a former kindergarten teacher in the HEP classroom at Lanai Elementary School.) Another explanation for the lesser increases by the Hana preschoolers was their generally higher pre-test scores which were, on the average, 6% greater than Lanai's. The Puunene children, although achieving the highest pretest scores (31%) failed to exceed an average of 51% for the post-test.

The Checklist of Basic Skills did not attempt to measure the pupils' growth in the affective domain. The lack of such a measurement may have been to the disadvantage of preschool projects emphasizing this area. The Puunene project, never-the-less, achieved significant and respectable gains in the skill areas that were tested.

TABLE 11

RESULTS FROM PRESCHOOL TEST OF EXPRESSIVE LANGUAGE

	HANA	LANAI	PUUNENE
Number of Pupils	20	19	20
Average Age at Posttest	59 mos.	57 mos.	59 mos.
Pre-Average Norm Score	102	90	92
Post-Average Norm Score	125	115	105
Average Norm Score Increase	23	25	13
Pretest Average Score	32.0	19.3	23.8
Pretest Average Percent Correct	42.7	25.7	31.7
Posttest Average Score	62.2	51.4	43.9
Posttest Average Percent Correct	82.9	68.5	58.5
Increase of Pre-Post Percent Correct	40.2	42.8	26.8

TABLE 12

PRE-SCHOOL PROJECTS

Pre-Post Percent of Criterion Success Achieved by Pupils on the Preschool Checklist for Basic Skills

	HANA			LANAI			PUUNENE			Posttest Scores District Average
ITEM CRITERIA	PRE	POST	INCREASE	PRE	POST	INCREASE	PRE	POST	INCREASE	
Colors Identified	45	100	55	30	86	56	42	90	48	92
Colors Named	44	97	53	22	87	65	29	70	41	85
Numbers Identified	12	85	73	2	81	79	37	87	49	84
Numbers Named	14	80	66	1	77	76	14	64	50	74
Shapes	20	100	80	23	91	68	61	78	17	90
Locomotive Skills	40	98	58	44	95	51	58	82	24	92
Other Skills	51	99	48	51	79	28	40	78	38	85
Upper Alphabet Identified	5	82	77	0	90	90	51	57	6	76
Upper Alphabet Named	4	81	77	0	89	89	3	3	0	58
Lower Alphabet Identified	0	71	71	0	85	85	41	48	7	68
Lower Alphabet Named	0	69	69	0	83	83	5	2	-3	51
Follow Directions	54	94	40	44	73	29	49	83	34	83
DISTRICT AVERAGE	18	84	66	12	84	72	31	51	20	73

ASSESSMENT OF PROGRAM

The assessment of various components of the Maui District ESEA Title I projects are presented in alphabetical order of the schools/projects. Each project component was evaluated on the basis of the following original and revised project objectives: (Refer to the Mid-Year Progress Report, SWDRC Report #127, for additional details regarding the goals and objectives).

Objectives for Reading Resource Rooms, 1973-1974

Schools: Haiku School
Kaunakakai Elementary School
Kihei School
Kula School
Paia School
Waihee School
Wailuku Elementary School

Revised Objective #1: Standard Test Scores will increase, on the average, to a learning rate greater than .1 average monthly gain in grade equivalent scores for reading recognition and reading comprehension between the pre- and post-tests.

Revised Objective #2: The amount of enrichment reading done by the pupils, as indicated by the number of high interest/leisure reading or non-text books, will be increased between the Fall and Spring terms.

Objectives for Preschools, 1973-1974

Schools: Hana High and Elementary School
Lanai High & Elementary School
Puunene School

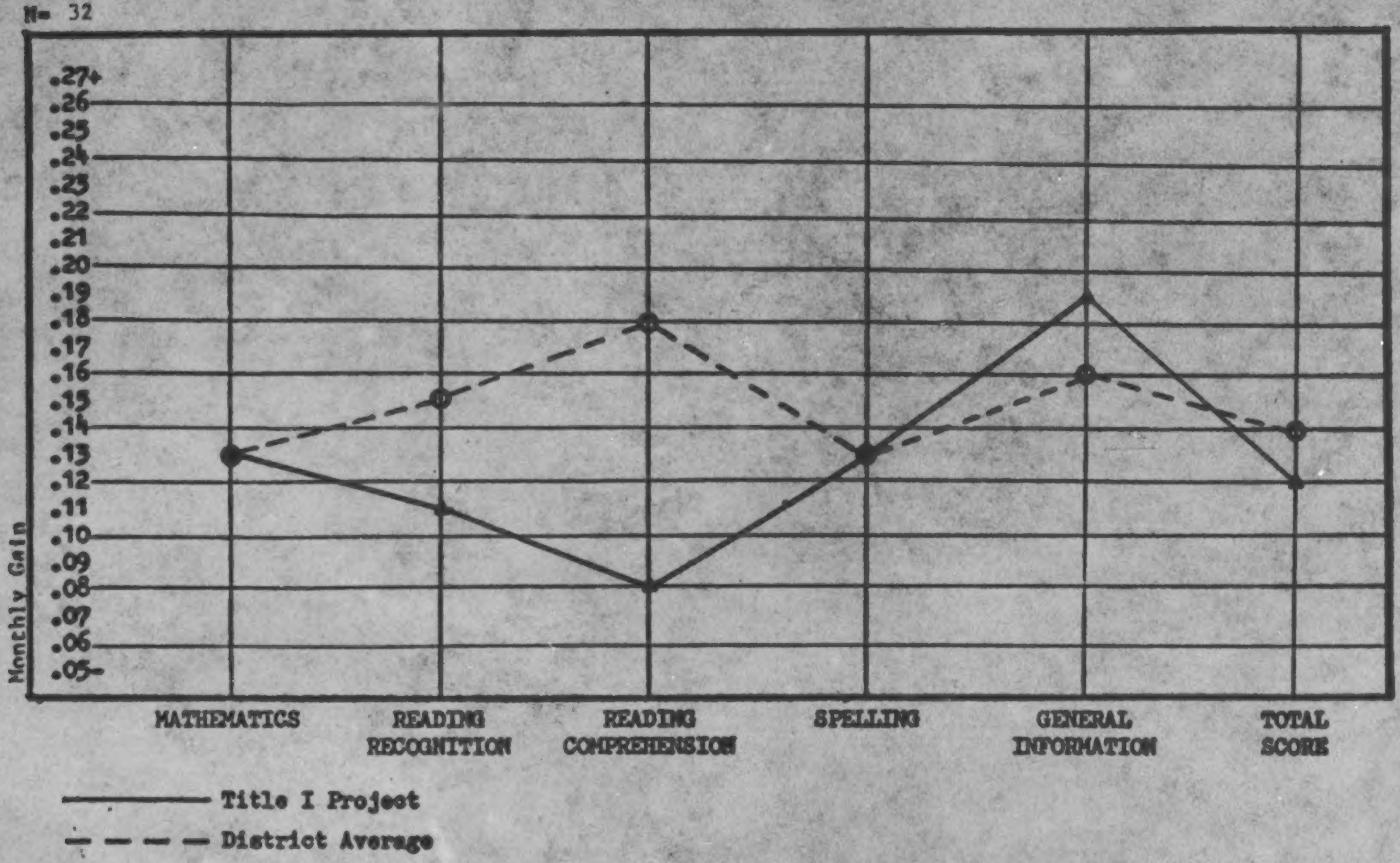
Revised Objective PS#1: Ninety percent (90%) of the children participating in this preschool project will improve (or remain 100% accurate) their responses in each of the twelve categories of skills on the PRESCHOOL CHECKLIST FOR BASIC SKILLS, developed and provided by the Social Welfare Development and Research Center.

Revised Objective PS#2: Ninety percent (90%) of the children will improve (or remain 100% accurate) their expressive language functioning by participating in the preschool project for a minimum six consecutive months during the 1973-1974 academic year.

TABLE 13

PROJECT: HAIKU SCHOOL

Average Monthly Gain on PIAT Subtests from Title I Project and District Average



HAIKU SCHOOL - Reading Resource Room Project

The Haiku School project involved 32 pupils from grades one through eight and one reading teacher. The classroom facilities were adequate in space and furniture and a good variety of reading instruction materials were evident. The students reported to the reading resource room according to grade levels and this ranged in number from one or two pupils per period to five or six, depending on the number selected from each grade.

The pupils of this project achieved a TOTAL SCORE average above .1 per month during the 1973-1974 academic year. The PIAT test results indicate that these children attained their lowest gains in READING (averaging .095 gain per month), and the most in GENERAL INFORMATION. The MATH and SPELLING subtest gains were equal to the District Average.

While the PIAT TOTAL SCORE was .12 gain, and just slightly less than the average of all projects, the variation between subtest scores was considerable and did not follow the District's overall achievement trends. Gains throughout the District more frequently occurred in the two subtests of READING, and less in GENERAL INFORMATION, MATHEMATICS, and SPELLING. This project's relatively low gains in reading may be attributed to the difficulty encountered in the individualization of reading instruction to eight different grade levels. With three, four, or five pupils from each grade level, precise diagnosis of pupil need and individualized instruction may have been less than necessary to attain success equal to the District average.

The achievement made, however, was significant. These pupils were learning at a rate of six-tenths of a year prior to their participation in the project, and twice that rate during it. The achievement rate of these pupils before the program began was second lowest in the District, yet their achievement rate during intervention was greater than that reached by several other projects.

Similarly, the percent of pupils above their previous baseline rates was very close to the District average, as was the percent of these pupils who achieved more than .1 gain per month.

Although the pupils' BEHAVIOR improved at a rate almost equal to the typical pupil of the District, their ATTENDANCE (as recorded and submitted) fell drastically in the last full month of the school year. The sudden decrease in attendance, as reported, was apparently due to the pupil illness. The NUMBER OF BOOKS which these pupils read, however, was reported to have been more than ten times greater during the last two months of the school year than during the first two.

The achievement of the pupils in the Haiku School Title I project was significant for their educational development. The test scores and other assessment data, however, were often inconsistent and the pattern of the gains made were not typical of most reading projects. While the project was beneficial to the pupils and helped them decrease their need for remedial instruction, further attention during the 1974-1975 academic year should be given to more precise individualization of instruction. A more consistent and effective classroom management system including appropriate pupil motivation, and greater involvement of parents should also be considered.

HANA HIGH & ELEMENTARY SCHOOL - Preschool Project

The preschool project at Hana High & Elementary School was organized and coordinated by the project teacher and one educational assistant. The twenty preschoolers utilized two rooms which were joined by an open doorway. Sufficient academic and achievement materials, and various other learning activities, were provided. The daily schedule included academic tasks, art work, play time, recreation, nap and lunch times, and general socialization among the pupils.

Each child was assigned specific duties and classroom chores for the day, such as cleaning a section of the room. Individual places on a large work table were provided and individualized attention by parent volunteers was given. All parents of these preschool children regularly volunteered their help during the year. If a parent, assigned to help the project on a specific day, could not come, it was his/her responsibility to contact another parent or community volunteer to assist in the class.

The two rooms allowed for the use of one area as an academic resource room, and the second primarily for play activity, recreation, and art work. During the morning period, both rooms were used for academic activity. Included within the rooms of this project were two Language Masters, a tape recorder with six listening stations, a small library and study area, and various instructional materials. Numbers and letters of the alphabet were along the walls, as was much art work by the pupils. One large chalk board was covered with pictures representing their colors, such as a blue balloon, a blue ball, and blue boat for the color blue; a brown bear for the color brown; a green tree for the color green, etc. Each set of pictures was labelled with the appropriate color of "BLUE", "BROWN", "GREEN", etc.

A larger calendar checked off each passing day, an attendance chart with the pupils' names was used to encourage self-direction (each pupil had to move his/her name to one side before they were recognized as being at school), and each pupil had their own self-made basket within which was indicated (on color-coded strips) the academic tasks to be completed that day. Most objects within the rooms were carefully labelled as "clock", "calendar", "table", "record player", etc. As these preschoolers earned enough points, "Happiness Letters" were sent home to their parents. During the afternoon hours the preschoolers had the opportunity to choose activities of their preference.

Table 11 indicates average improvement in expressive language skills was 40.2% between pre- and post-tests. This was accomplished by all twenty (100%) preschoolers who made highly significant improvements in the TEL scores. The norm scores showed a 23 point jump from 102 to 125 between pre- and post-tests. The objective (PS#2) was surpassed handily by this project.

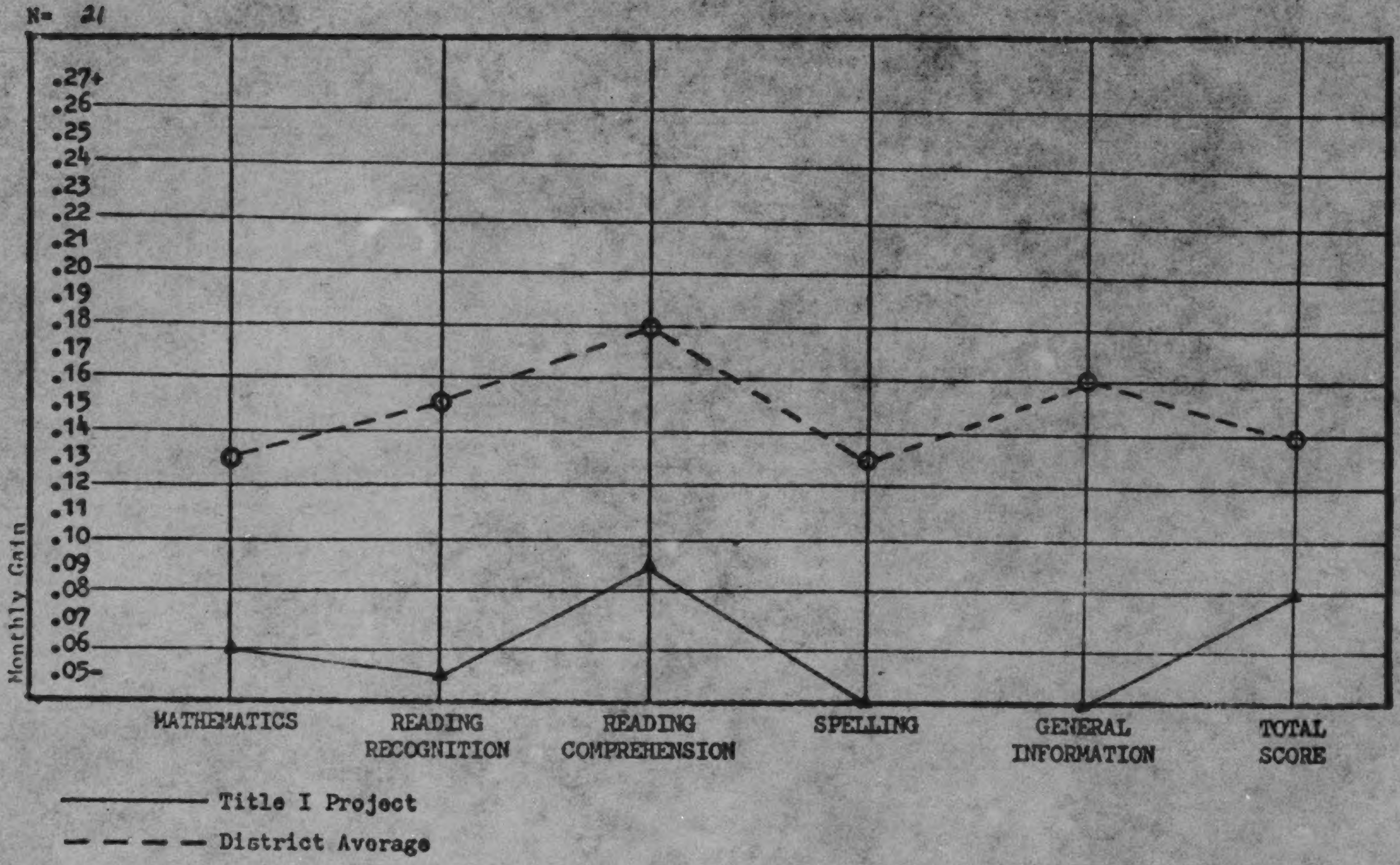
These twenty pupils (100%) of the Hana preschool project achieved eighty-four percent success on the post-test of the Preschool Checklist for Basic Skills. No other preschool project achieved more. The pupils made remarkable success on every criteria of this Checklist, although the least success occurred in naming and identifying the lower alphabet. One hundred percent success was attained on colors identified and shapes, with almost perfect achievement on color names, locomotive skills, other (social) skills, and following directions. Overall, the achievement was considerable and representative of the project's organization and environment.

With puppets, puzzles, appropriate teaching devices, decorative and instructional materials around the classroom and a specific schedule of daily activities, the project proved in fact, to be very successful. The two rooms were neat and well organized, parental involvement was fully evident, and the pupils appeared to be motivated toward the class. The Title I preschool project at Hana High & Elementary School was very beneficial to its pupils and highly effective. The program should continue to offer these academic advantages for other preschoolers during the coming school year.

TABLE 14

PROJECT: KAUNAKAKAI ELEMENTARY SCHOOL

Average Monthly Gain on PIAT Subtests from Title I Project and District Average



KAUNAKAKAI ELEMENTARY SCHOOL - Reading Resource Room Project

This project was situated in a very attractive and adequataly equipped classroom with sufficient reading instructional materials. A second-year project, the Kaunakakai reading program included thirty pupils, of whom only twenty-one were pre- and post-tested. The teacher applied systematic behavioral management principles to motivate her pupils and many showed evidences of being self-directed and functioning. Unfortunately, the project teacher became ill during the last two months of the school year and post-testing was completed by the Molokai Complex Child Development Team of the Special Services program. This latter factors may have influenced the relatively poor achievement outcomes of the pupils in this project.

The academic gains achieved were the lowest of Maui District. No subtest gain was at or above the average, and none reached the .1 gain per month necessary for remediation to effectively occur. The READING gains averaged .07 per month, and the GENERAL INFORMATION subtest scores resulted in the only decreased rate of learning in the District.

Another possible reason why these twenty-one pupils achieved less than most others throughout the District was that they were achieving only one-half of a month's grade level gain (per month of instruction) before the project began. No other reading program taught pupils with such a low baseline rate, and overcoming this initial deficiency was apparently very difficult. That these pupils, who were achieving half as much as their non-Title I peers before the project, did achieve a rate almost equal to other pupils is commendable. Seventy-one percent of these pupils were achieving a greater learning rate during the project than before it began.

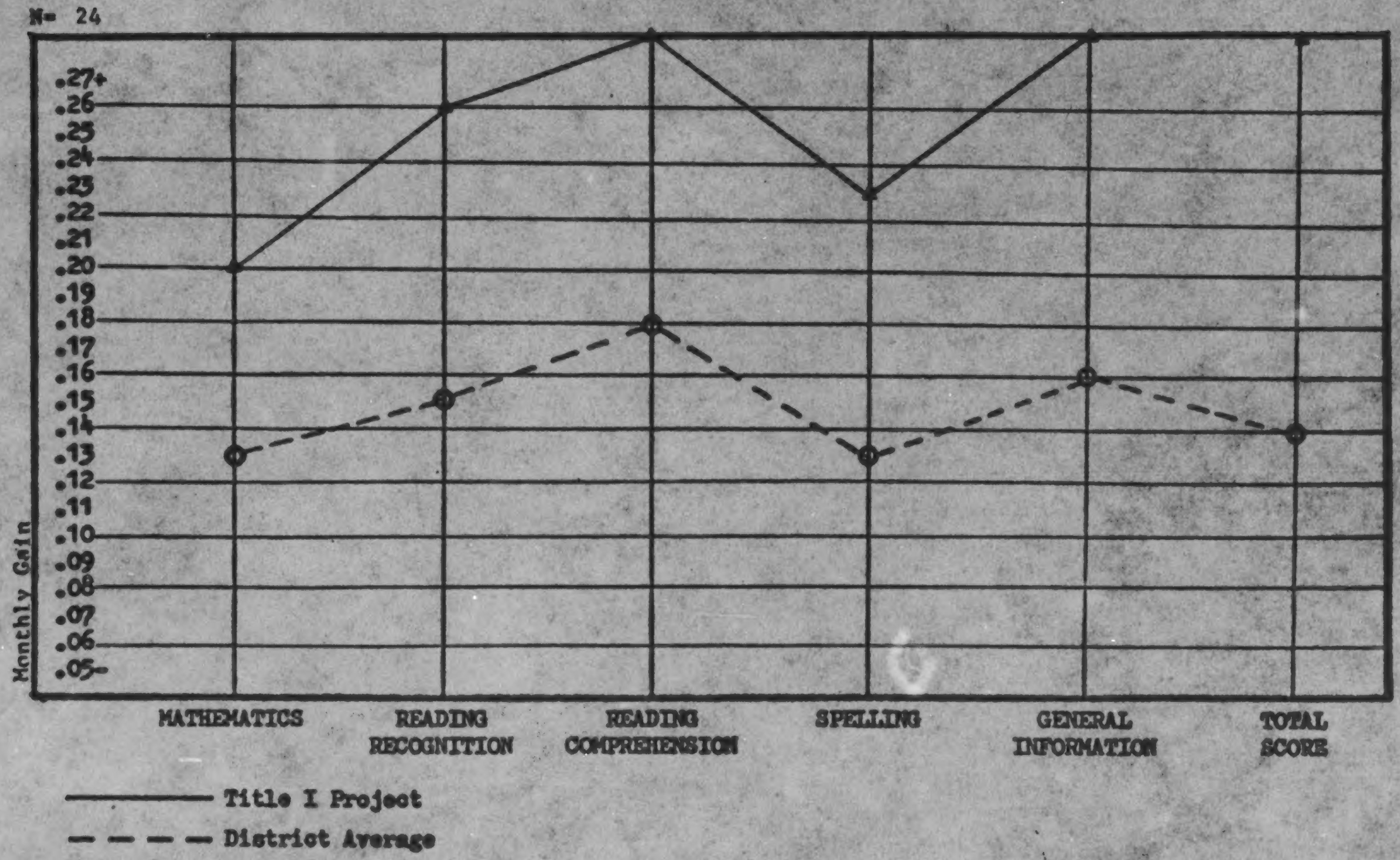
While the pupils' BEHAVIOR improved somewhat during the school year as judged by the project teacher, it was less than the average improvement of other Title I pupils. The ATTENDANCE rate showed little change during the school year, yet was still well above the District average at the end of the year. The opposite was true of the LEISURE READING performed by these pupils, where their reading (i.e., number of books read) increased during the year, but not as rapidly as most projects' pupils.

The children involved in the Kaunakakai reading project made considerable achievement during the school year relative to their low initial learning rate. They did not, however, succeed as well as other Title I or non-Title I children. The criterion of .1 gain per month was not met.

TABLE 15

PROJECT: KIHEI SCHOOL

Average Monthly Gain on PIAT Subtests from Title I Project and District Average



KIHEI SCHOOL - Reading Resource Room Project

The Kihei School reading project operated out of a rather dilapidated building which was formerly used for art classes. However, the facilities were much more adequate this year than previously, especially in consideration of the school's general overcrowded situation due to the increasing enrollment each year. The project teacher was able to effectively utilize all available space and the overall learning environment was significantly improved. Approximately thirty pupils were served, at any one time, throughout the year.

The Kihei School's reading resource room, with twenty-four pupils, pre- and post-tested, achieved significantly more than any other Title I project of Maui District. The monthly gains were exceptionally high, and some caution should be exercised in its reliability, although the correlations indicate that these children all made significant gains. These pupils achieved .33 gain per month in READING (or over three years). While this project was successful, and of considerable benefit to these pupils involved, these exceptionally high gains may not accurately represent the real success that was achieved by the pupils.

Grade levels three through six were served by the Kihei reading project and their success largely contributed to the fact that these same grades ranked as the four most successful in the District.

Achieving a baseline of .07 per month before entering this project (which was slightly below the average), the pupils gained .25 of a year's grade level for each month of the project. While these pupils made considerable achievement during the school year, and the project was of great benefit to them, the gains appeared excessively great. During the academic year the pupils were learning (as recorded by test scores) over three and one/half times faster than they had before the project. Their learning rate in reading, furthermore, was almost five times greater during the project than before it began. No other Title I program matched or even approximated such high gains.

Similarly, the pupils all (100%) attained learning rates above their baseline rates, and above .1 gain per month. Yet the improvement of BEHAVIOR, as estimated by the project teacher, was the lowest in the District, and the ATTENDANCE rate was second lowest (and decreased considerably from the beginning of the school year.)

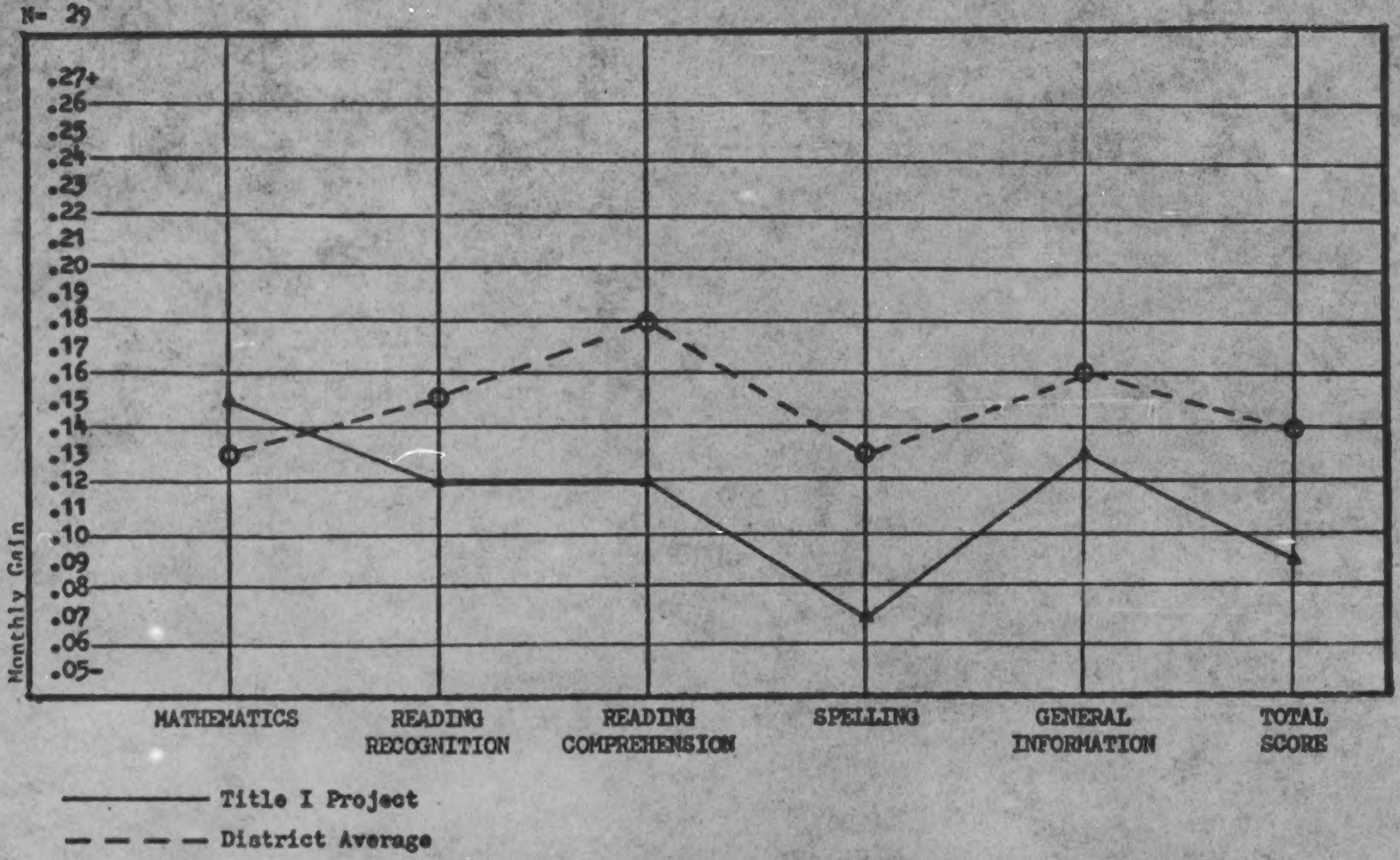
A classroom management system based on systematic application of behavioral management techniques was evident in this project. The pupils were taught self-direction and a good arrangement of the furniture and activities permitted efficient instruction.

The Kihei School's Title I reading project succeeded in improving its pupils academic abilities. The precise extent of this achievement, however, as indicated by the recorded gains, should be accepted with caution. The actual success of these pupils may be more accurately assessed from their continued achievement during the 1974-1975 school year.

TABLE 16

PROJECT: KILOHANA ELEMENTARY SCHOOL

Average Monthly Gain on PIAT Subtests from Title I Project and District Average



KILOHANA ELEMENTARY SCHOOL - Reading Resource Room and Counseling Project

Objectives for Reading and Counseling Project, 1973-1974

Revised Objective KS#1: To effectively instruct the project pupils in reading skills so they achieve, on an average, a learning rate greater than .1 average monthly gain in grade equivalent scores for reading recognition and reading comprehension between pre- and post-tests.

Revised Objective KS#2: Attendance at school of identified pupils of this project, with attendance problems will, on an average, increase by fifty percent (50%) from the months of October and December, 1973 to the months of February and April, 1974. Attendance of all other participating students will increase by an average of five percent (5%).

Revised Objective KS#3: The personal and interpersonal interactions and behaviors of the participating pupils in this project will, on an average, increase by 36% between the end of September, 1973 and the end of April, 1974.

Revised Objective KS#4: The participating pupils' self concept will, on an average, be improved by 25% between the pre- and post-tests of individually administered self concept measuring instruments.

The ESEA Title I project at Kilohana Elementary School involved separate reading and counseling components. The two components were staffed by a reading teacher and a counselor operating out of two separate but adequate facilities. Both components featured individualized instruction with a good assortment and array of reading instruction materials, perhaps the best of any school within Maui District. Each component also featured a variety of media devices to be used with the instructional materials. The reading teacher, to enhance individualization and motivation, applied systematic behavioral management techniques - including a token economy and a contingency contracting system.

The pupils' achievement on all subtests except MATHEMATICS indicate gains less than the District averages, yet most are above the remedial criterion level of .1 gain per month. Both READING subtest gains were .12 per month, or two/tenths of a year greater than the average non-Title I child. Such scores which were relatively consistent and typical of the District's general achievement, indicate that remediation in reading was occurring.

This project's baseline rate was .08 per month, and equal to the average of all other pupils' learning rates. Achievement during the school year was also close to the District averages, with four other projects achieving at or above the .12 monthly gain in reading and three below this level.

As a reflection of the pupils' test scores, both the percent of pupils above their baseline rates and above .1 monthly gain were somewhat less than the average District achievement. BEHAVIORAL improvement, however, was similar to that of other projects, as was the slight decrease in ATTENDANCE. The NUMBER OF BOOKS read by these pupils decreased during the year, and this was the only project in which this occurred. Such subjective data, however, may not be accurate, for while the books decreased in number their size and difficulty may have increased.

The Piers-Harris Children's Self Concept Scale entitled, "The Way I Feel About Myself," was used as one of the instruments to measure objective KS#4. The Scale is a quickly completed self-report instrument designed for children over a wide age range. The Scale was designed primarily for research on the development of children's self attitudes and correlates of these attitudes. The authors caution that any use of the instrument, other than for research, should be entered into cautiously and subject to specified limitations.

TABLE 17

Piers-Harris Children's Self-Concept Scale: Mean Scores by Grade Level, Kilohana School

Grade	N	Pre-Percentile*	N	Post-Percentile*	Gain/Loss
2	5	69	3	74	+5
3	6	77	6	79	+2
4	10	69	10	69	-0
5	5	38	5	49	+11
6	6	52	5	80	+28
Total	32	61	30	70	+9

*The norms used for converting the raw scores to percentiles are for grades 4-12. No norms are available below grade 4.

These scores indicate that the students at Kilohana School have a higher self-concept than 61% (pre-) and 70% (post+) of the student population from grades 4 to 12. Each grade, except for the fifth grade, was above average (50th percentile) in self-concept.

Analysis of individual scores indicate that 18 students gained an average of 19.7 in percentile rankings while 10 students lost an average of 18.2 percentiles. Two students showed no changes. The average gain is unreliable since a few pupils made extremely high gains while others made little gain (or considerable losses) from their initial percentile scores. The sixth graders as a group, however, made the significant average gain of 28 with a high correlation. Since average overall gain was less than 25%, this measurement of objective did not achieve the criterion. As noted in the Piers-Harris Manual, a higher score should be expected between pre- and post-tests. If this scale is used to evaluate any program, a comparison control group is essential.

The Children's Internal-External (I-E) Scale was also administered to the Title I participants at Kilohana School to measure Objective KS#4. The I-E Scale is a short paper and pencil test with forms available for use with adults, high school youngsters, and elementary school youth. This scale measures what is called the internal-external (I-E) locus of control. It is a continuous dimension rather than two separate categories.

Internal locus of control simply means that the person sees his or her behavior as being self-determined or "coming from within". External refers to the opposite, i.e., determined by others or "coming from without". The distinction is analogous to the difference between skill and luck or fate.

The purpose of using the I-E Scale in the school is to investigate its potential to obtain maximum effectiveness of school programs. In such instances the names of individual students or teachers are necessary. Student and teacher scores, (and their various combinations, e.g., E-E. I-I, I-E, E-I) may well relate to grades, attendance, achievement test scores, and to the type of programs which work best with which students (teachers and combinations).

TABLE 18

I-E Scores By Grades: Kilohana School

Grade	Average Score
K	3.8
1	5.3
2	5.1
3	2.7
4	4.2
5	4.8
6	2.8
Total	4.1

The possible range of scores is from 1 to 10. The higher the score the more externally oriented is the individual. The average scores listed above show that grades 3 and 6 are relatively more internally oriented and grades 1 and 2 relatively more externally oriented. These scores may be useful if they are matched with the I-E scores of teachers and correlated with grades and attendance.

The Adult I-E Scale was administered to nine teachers at Kilohana School. The possible range of scores was from 1 to 29. The teachers' scores were generally low to low-average with a score range of 2 to 12. Based on the I-E combinations, if pupils with low scores (I) were matched with and taught by teachers with low scores (I), such pupils would probably have made more significant improvements in school than those whose scores were not matched.

Finally, a correlation study was made from the results of the Piers-Harris I-E Scale, and PIAT scores to determine if there were any relationships between the gains of the students participating in the ESEA Title I project.

TABLE 19

Correlations: Kilohana School

Gain on Piers-Harris and Gain on PIAT = .06
Gain on Piers-Harris and Gain on I-E =(.06) minus
Gain on PIAT and Gain on I-E = .25

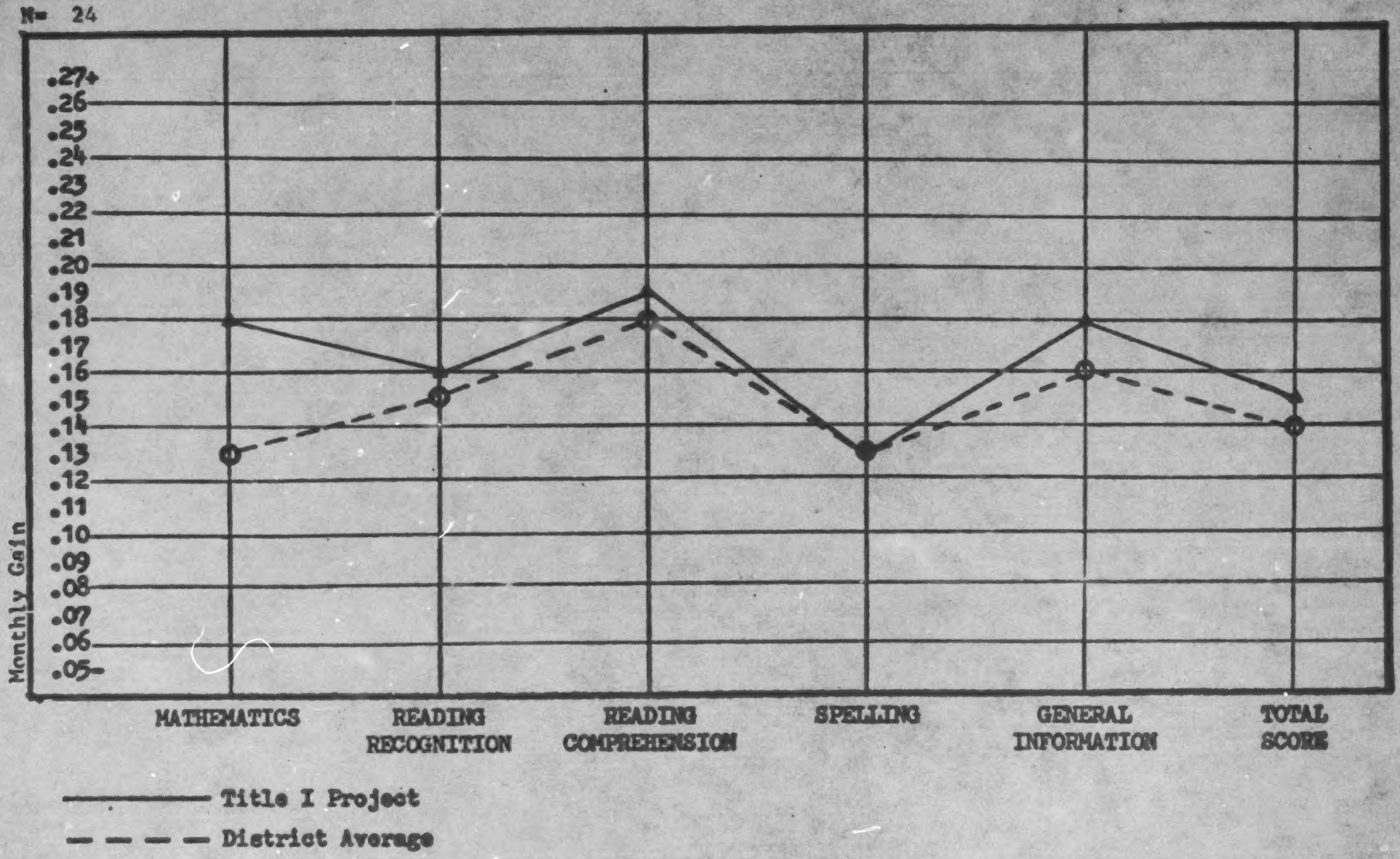
Conclusion: There was no reliable relationship among the gains on the Piers-Harris, PIAT, and pre-test results of the I-E Scale.

The reading project at Kilohana Elementary School helped its Title I pupils to achieve more than the typical pupil, and thereby helped to close their gap in academic ability. Some questions must be raised regarding the apparent duplication of effort by the reading teacher and counselor. Amalgamation of both components into one unit may effect even greater achievements for the educationally deprived pupils of East Molokai.

TABLE 20

PROJECT: KULA SCHOOL

Average Monthly Gain on PIAT Subtests from Title I Project and District Average



KULA SCHOOL - Reading Resource Room Project

The Kula School's ESEA Title I reading project involved thirty pupils from kindergarten through grade six. With two, three, or four pupils from each grade level, approximately five children would meet together each class period. Gains achieved during the year by these pupils were relatively large and indicate the relative success of this project. The criterion of achieving more than .1 per month was met on every subtest, with the READING gains (.175 per month) especially high. The increased academic abilities shown by the high scores on other subtests were largely due to the reading improvement of these pupils.

The project's pupils were among the most achieving Title I children in the District. While their average baseline rate before the project began was .07 (or just below the District average), they were learning at a rate more than twice as fast during the school year.

The success of these pupils was also shown by the fact that 92% of them achieved above their baseline learning rates, and eighty-three percent increased their achievement beyond the .1 monthly criterion level. While the pupils' BEHAVIOR was estimated to have improved only slightly, and their ATTENDANCE rate (although highest in the District) did not improve, the NUMBER OF BOOKS which these pupils read increased during the year. The pupils each read approximately two and one-half books during the last two months of the school year than during the first two.

Despite the continuing problem of very inadequate facilities - the teachers' (men) lounge served as the reading resource room - the Kula School's reading program was effective, very beneficial to the pupils, and of significant value to the childrens' future academic success. This school will not be eligible for ESEA Title I programs during the 1974-1975 academic year due to changes in the economic status of families of the total school population. Every attempt should be made to continue some form of specialized reading services for the underachieving pupils at Kula.

LANAI HIGH AND ELEMENTARY SCHOOL - Preschool Project

The project teacher, educational assistant, and nineteen children of the Lanai preschool project were located in a large and adequate classroom area at the school. The pupils engaged in music, physical exercise, academic tasks, lunch and nap times, and considerable art work and handicrafts. One section of the room was primarily reserved for academic work, while another was exclusively for art and enrichment activities. Sufficient equipment and instructional materials were provided for the pupils, the classroom had an adequate number of desks and chairs, and floor space was effectively utilized.

Attached to most walls and chalk boards was the art work which pupils had completed. Numbers and letters of the alphabet were evident, and each pupil was expected to perform specific academic tasks during the daily routine. Most significant about this preschool project was the effective control of the children which was demonstrated by the project teacher. She expressed confidence, motivation, and enthusiasm for the project, and this was apparently felt by the pupils and became a part of their daily activities.

As it is indicated on Table 11, average improvement in expressive language skills was 42.8%, highest among the three preschool projects in Maui District. All (100%) of the pupils showed significant gains in the TEL scores between pre- and post-testing. The average norm score for the project changed significantly from 90 to 115. This project fully achieved Objective PS #2.

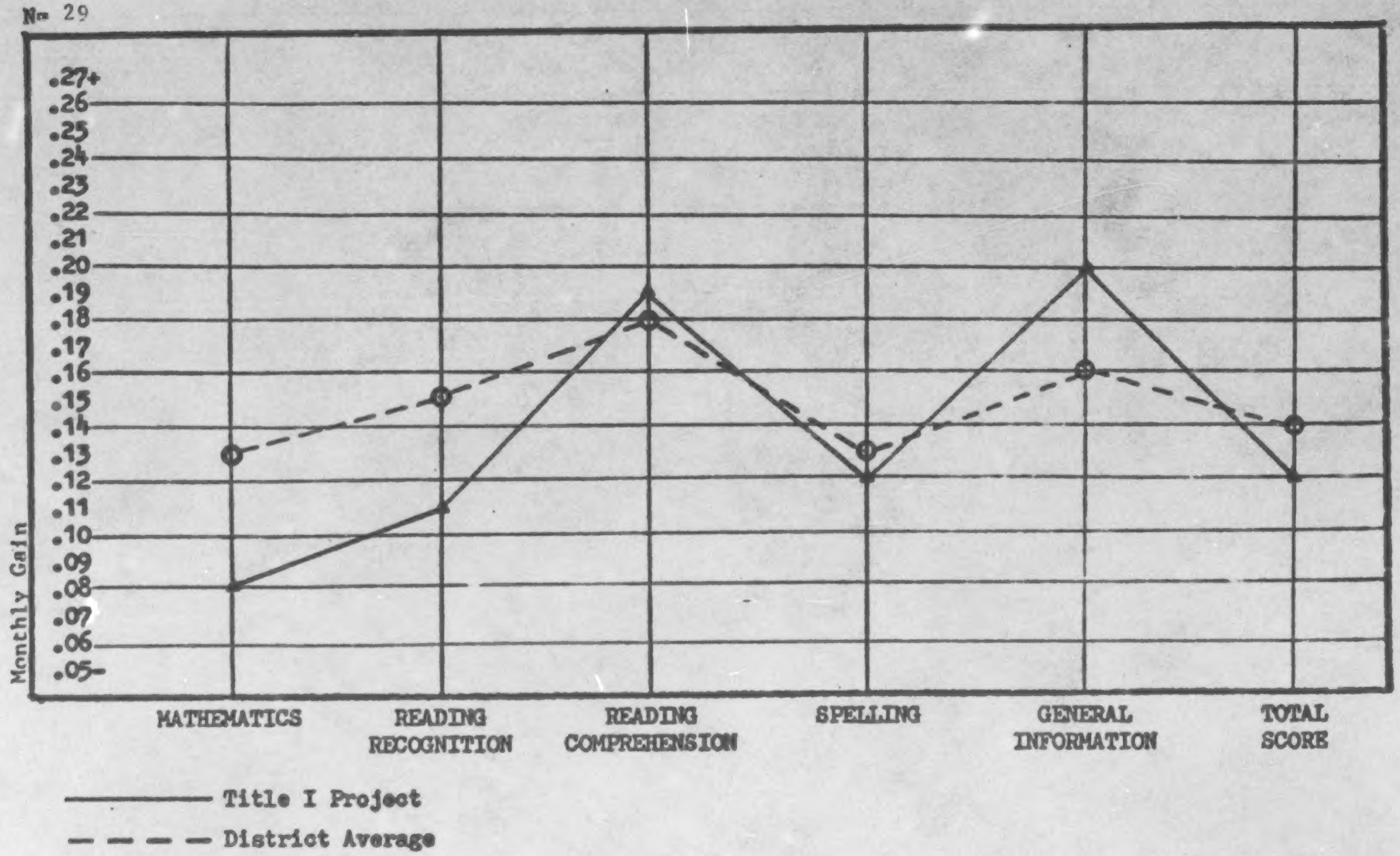
The nineteen pupils of this Lanai preschool project achieved an average of seventy-two percent increase on their performance of all twelve criteria of the Preschool Checklist for Basic Skills. This was the highest increase of any preschool project in the District. While the post-test achievement was consistent among all item criteria, the greater gains were made in naming and identifying the letters of the alphabet. Such large gains in this area were not typical of other Maui preschools but they do reflect the classroom environment, academic emphasis, and the enthusiasm of the project teacher.

The Lanai preschool project was successful, it significantly benefitted the preschool children involved, and its effect will hopefully be of lasting value to these pupils as they enter the early elementary grades.

TABLE 21

PROJECT: PAIA SCHOOL

Average Monthly Gain on PIAT Subtests from Title I Project and District Average



PAIA SCHOOL - Reading Resource Room Project

The Paia School reading project has exhibited steady growth and improvement over the past few years. Conveniently located and adequately furnished with equipment and materials, the reading program's improvement can probably be attibuted to the stable assignment of the same teacher over the period since ESEA Title I programs were implemented at the school.

The gains achieved by the children in this project were generally above the .1 average monthly gain criterion level, with their achievement in READING especially high. The unusually great gain in READING COMPREHENSION (.19 per month) indicates the direct influence which this Title I project had upon these children's reading achievement. The gain obtained on other subtests may have been largely due to the pupils' reading improvement.

These children, from the first through fourth grades, achieved an average gain from the PIAT test which was greater than the .1 per month criterion. All subtests (except MATHEMATICS) were also above this level of achievement. Their baseline rate, however, was .1 before the program began. Due to this relatively high baseline achievement virtually little increase could be expected in the pupils' functioning ability. The typical pupil in this project was achieving approximately as much during the reading intervention as he had done prior to entering the project. However, 66% of the pupils succeeded in surpassing their baseline rates while 59% of the pupils achieved above the .1 monthly gain.

The pupils' BEHAVIOR, however, was estimated at having improved considerably - at a rate well above any other project. Yet, while the project teacher judged their behavior as having improved, the pupils' rate of ATTENDANCE decreased by almost twenty percent. Data regarding the NUMBER OF BOOKS which the pupils read was not submitted.

While the Paia reading resource room was successful in improving the pupils' reading performance, their overall gain and average score did not surpass the ability level which existed before the program began. The averaging of many scores and subtest gains was unusually detrimental to accurate assessment of this project's specific effectiveness. As a reading project, however, the gains attained in READING RECOGNITION and READING COMPREHENSION were high, and the program was very beneficial to the children's long term success in school. Increased follow-through activities with the children in their regular classrooms may help to improve overall performances of those Title I students at Paia School.

PUUNENE SCHOOL - Preschool Project

Twenty children were involved in the Puunene preschool project. This Title I program was organized and managed by the project teacher, and supported by one educational assistant. The pupils worked on academic tasks, engaged in physical exercise and art and enrichment activities, and were provided with lunch and rest periods. Sufficient instructional equipment and materials were provided, and adequate supplies of art and handicraft materials were also available in a classroom facility which was more than adequate.

One hundred percent of the preschool pupils at Puunene School improved their TEL scores during the year. This achievement surpasses the objective criterion (PS#2) and as indicated on Table 11, these children's expressive language skills improved by an average of 26.8%. Their norm score averages moved from 92 to 105, a change of 13 points which was very favorable.

The twenty pupils of the Puunene preschool project increased their achievement on the Preschool Checklist for Basic Skills by 20%. This was considerably lower than the seventy-three percent average for the District. The objective that 90% of these children improve on the Checklist was not met. Only 83% of these preschoolers made some improvement on this test.

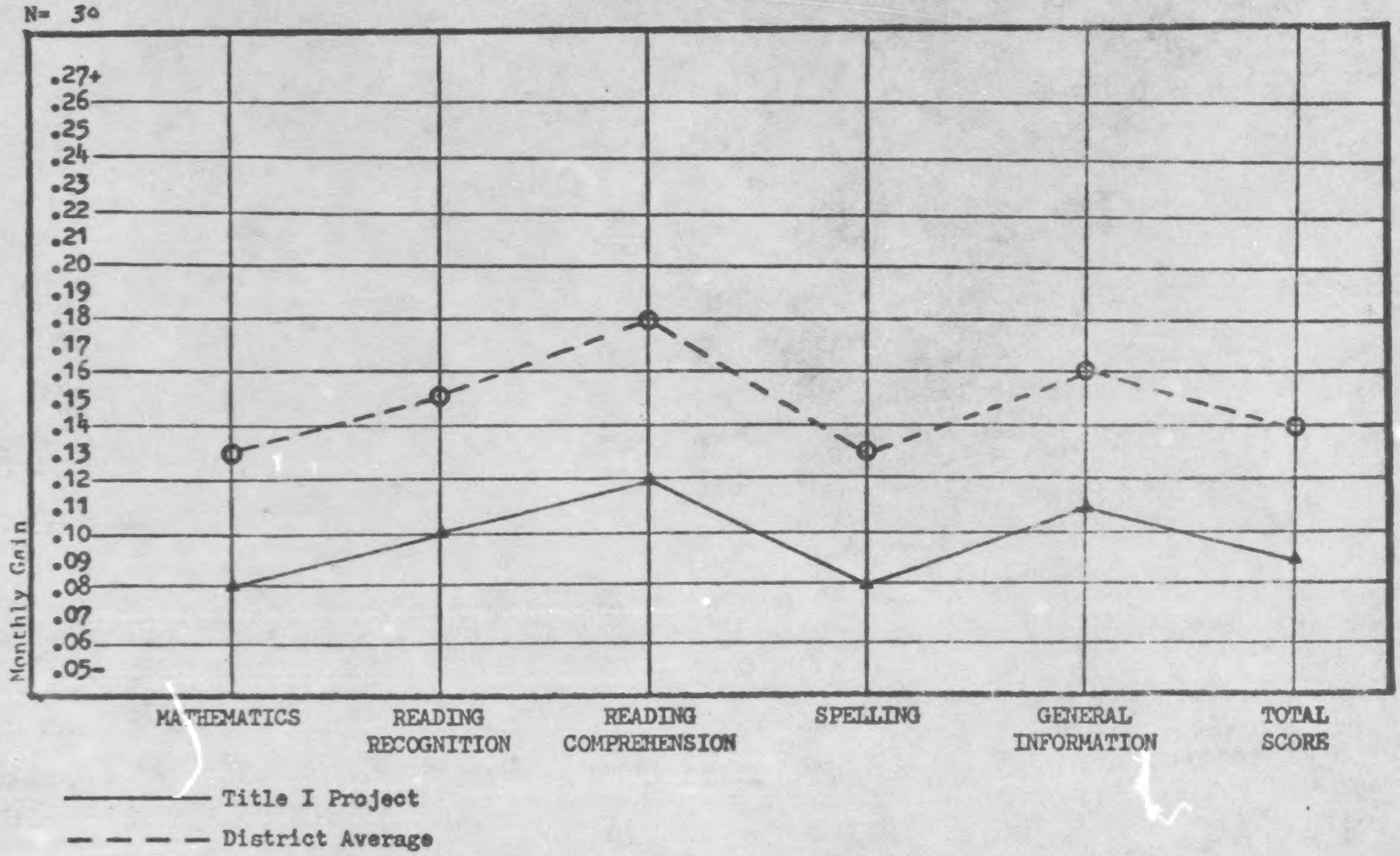
While th post-test results of the Puunene preschool project were lower than the other two preschools (51% vs. 84%), the pre-test scores were considerably higher (31% vs. 15%). The resultant differences between the pre-test scores and those from the post-test were therefore relatively small.

While the project teacher of the Puunene preschool exhibited considerable dedication and concern for the personal welfare and education of these children, the general community environment and the apparent lack of adequate support from the parents may have inhibited the achievement of these pupils toward greater successes. The preschool project was never-the-less beneficial to the participating pupils. Because the school does not qualify (economic criterion) for ESEA Title I programs during 1974-1975, the preschool program will be terminated at Puunene. Faced with apparent severe cultural and social deprivations these children will require some form of continued assistance and preparation prior to their enrollment in regular school classroom. Community action through able leadership and guidance may help restore that which the ESEA program can no longer continue.

TABLE 22

PROJECT: WAIHEE SCHOOL

Average Monthly Gain on PIAT Subtests from Title I Project and District Average



WAIHEE SCHOOL - Reading Resource Room Project

Located in more adequate facilities this year, the Waihee School reading project was adequately furnished and equipped with a good supply of reading instruction materials. The project teacher, in her third year in the position, ably structured the classroom for self-direction and effective motivational management through systematic positive reinforcement techniques. Thirty pupils were serviced throughout the year and they represented the entire school - grades one through eight - except kindergarten. The gains throughout the year by the pupils were not as high as anticipated and this may have been (at least in part) a result of the many different grade levels served. With approximately four pupils from eight different grade levels, accurate diagnosis and prescription of materials to each child was difficult for the one teacher to effectively accomplish.

The pupils did, however, attain a .11 gain per month in READING, yet a .09 monthly achievement rate in the other three subtests of the PIAT. That the gain was greatest in READING reflects the real success of this project, since the emphasis of the project was directed to reading improvement. The higher gains in reading are probably not due to chance, but to the effect of the program upon these children's ability.

The project helped these children to increase their baseline learning rate by three-tenths of a year. While learning at a .07 average monthly rate before entering this reading program, the children reached the .1 gain per month during the school year. Although the gains were not equal to the District average, they nevertheless represent an initial beginning from which the pupils may continue to develop and increase their successful educational accomplishments.

The level of success attained by these thirty pupils was also shown by the fact that 77% of them achieved learning rates above their baseline rates. Such academic improvement was probably rewarding for them, and with continued remedial help they may be able to successfully match the accomplishments of other, even higher achieving, non-Title I pupils.

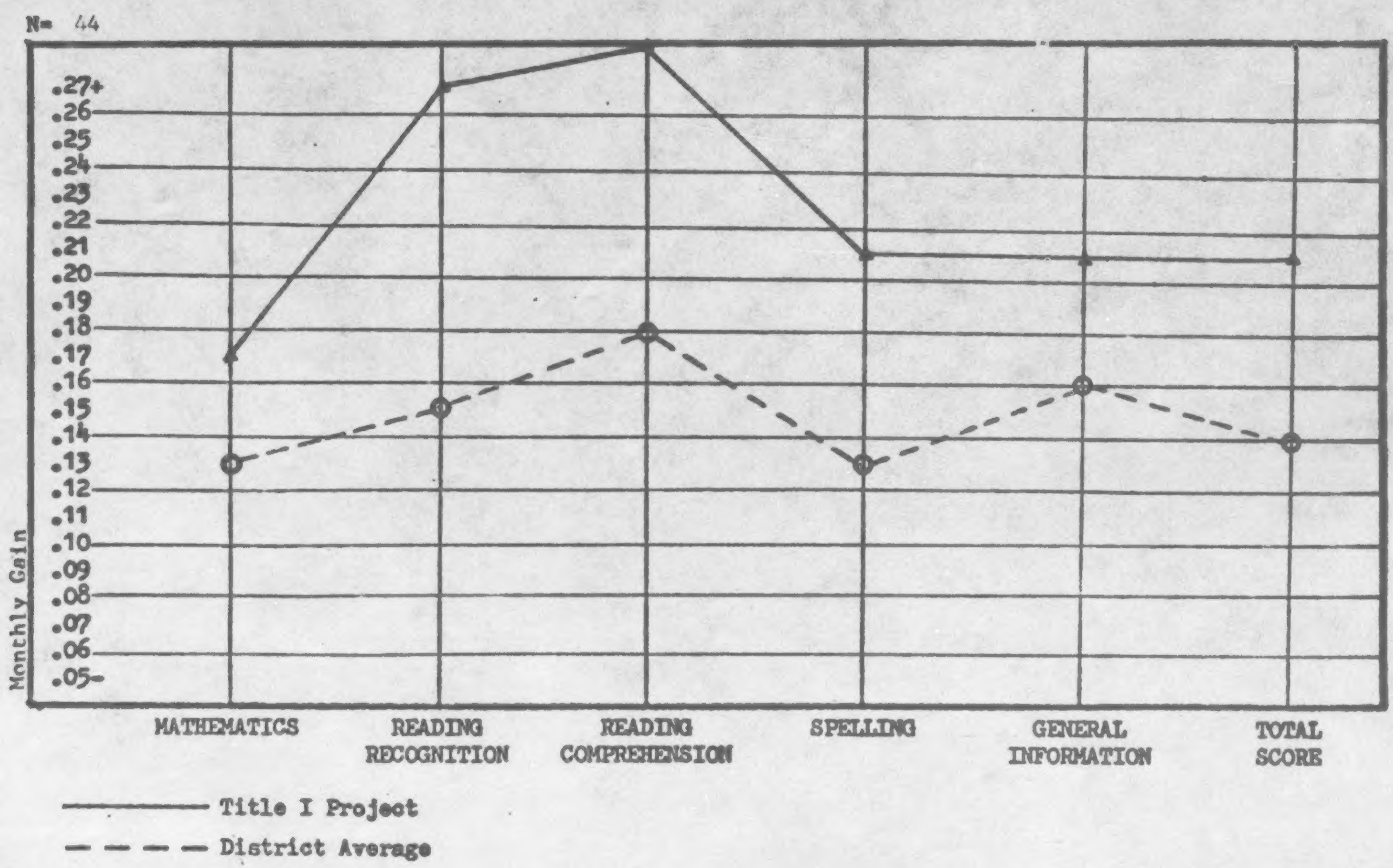
The children's BEHAVIOR was estimated to have improved at a rate equal to that of all other Title I pupils in the District. Although their ATTENDANCE rate decreased slightly during the school year, it was still well above the District average during the four months that the assessment was made. An increase in LEISURE READING also occurred within this project, as measured by the number of books read during the first and last two months of the school year. (The actual number of books read by the pupils, however, was considerably fewer than those read by the pupils of any other reading resource room.)

The Waihee Title I remedial reading project was successful in that it improved the average reading ability of its thirty pupils. Gains on other subtests were not as great, but these do not reflect the more direct emphasis which this project had upon its pupils. With pupils from fewer grade levels, i.e., with a more homogeneous group, individualized instruction could have been more accurate and the entire program more effective.

TABLE 23

PROJECT: WAILUKU ELEMENTARY SCHOOL

Average Monthly Gain on PIAT Subtests from Title I Project and District Average



WAILUKU ELEMENTARY SCHOOL - Reading Resource Room Project

The ESEA Title I reading resource room at Wailuku Elementary School involved 53 pupils, the project teacher, and one educational assistant. The classroom desks and tables were conveniently arranged and the instructional materials were centrally located. Teacher-made materials and commercially prepared reading materials allowed for individual diagnosis and prescription of specific instruction for each pupil. Reading enrichment games were also available for use by the pupils. A tape recorder with listening posts, Language Master, and phonograph were a fundamental aspect of daily classroom activity. Instructional strategies included one-to-one, small group and independent learning activities.

A large wall chart which graphically indicated individual pupil progress was utilized throughout much of the school year. While the purpose of the chart was to show individual achievement and encourage the pupils to earn better grades, it also recorded the points earned. These points could be spent on games and free time activity. Certificates were awarded for exceptional work and primary rewards were used to increase pupil motivation for lesser tasks. Simple reinforcing event menus showing the work required for completion of group contracts, were also posted appropriately on the walls, as were objectives for desired classroom behaviors.

Seven pupils who began with the program in September either left the project or were absent during the post-testing period during the second week in May. The achievement and academic gains attained by the 46 pre- and post-tested pupils of this project were very high.

With accurate diagnosis of pupil needs, sufficient materials, individualized instruction, and the help of an assistant, these gains were not unreasonably great or out of proportion to the effectiveness of the project. Of significant benefit to the program, and to pupil achievement, was the fact that the systematic classroom management system was established to enable these pupils to be self-directed. Upon entering the classroom they knew exactly where to go and what to do for the day.

The READING RECOGNITION and READING COMPREHENSION gains were considerably above those of the other subtests, and averaged .28 - or almost triple the .1 monthly criterion level. These children also made significant gains on the other three subtests, reflecting the immediate benefit from an improved reading ability. All gains achieved on the PIAT test, meanwhile, were realtively similar, with only .04 average monthly difference between subtests. Averaging .1 monthly baseline before the project began, these pupils achieved a learning rate considerably above that during intervention. Two and three-tenths years were gained by the pupils of this project. and over half of that was entirely remedial. By the end of the year the children were one and three-tenths of a year closer to the ability level of their non-Title I counterparts.

No less than 98% of these pupils achieved learning rates above their baseline rates, as well as above .1 monthly gain. Only one child did not academically benefit from this project with equal success. The pupils' BEHAVIOR improved (as estimated by the project teacher) at a rate somewhat faster than the District average, yet the ATTENDANCE rate fell by seven percent. Although the NUMBER OF BOOKS which the pupils read increased very slightly, the difficulty and length of these books also appeared to increase during the school year.

The reading resource room at Wailuku Elementary School was a very successful and effective Title I project. Academic achievement by the pupils was high and the data was both reliable and consistent. It was the only project in Maui District that attempted and succeeded in following nearly all recommendations from the 1972-1973 Evaluation of Project Components. The classroom was well organized, the pupils self-directed, and the project's success was commendable.

CONCLUSIONS & RECOMMENDATIONS

Note: The many notable accomplishments and achievements of the Maui District ESEA Title I projects are summarized here. Many areas in need of improvement were identified and have been previously discussed with the personnel of the Maui District office. A number of recommendations have already been implemented - at this writing - and the situations remedied or improved.

The 1973-1974 Maui District ESEA Title I program involved the following general statistics:

ESEA Title I Schools		11
Number of component projects		11
Reading Resource Rooms	8	
Preschools	3	
Number of Personnel		15
Full-time teacher	11	
Full-time counselor	1	
Part-time EAs	4	
Number of target pupils		315
Reading Resource Rooms	256	
Preschools	59	

The nature and content of these component projects varied according to their purpose, overall design, and specific objectives. The reading projects attempted to provide individualized instruction; the preschools supplied their children with the necessary educational foundations required for future academic success; and the Kilohana project promoted among its pupils self-confidence and scholastic achievement. Although different and varied, the goal of all projects was to provide educationally deprived children with the essential instruction for their future success in school.

The reading projects' use of various instructional materials, teaching devices, and techniques of classroom management were generally adequate. The arrangement of materials, classroom furniture, and the utilization of available floor space, was most frequently efficient. In most reading projects individualized instruction was the focus and the classroom environment generally productive. Approximately 82% of Maui District's Title I pupils were learning more, and learning at a faster rate, than they had before the 1973-1974 school year. The knowledge gap between Title I and non-Title I pupils was decreasing as these projects' remedial services helped the pupils to overcome their frustrations and academic limitations.

The reading teachers' past experiences, their willingness to ask questions and utilize innovative teaching approaches, and their desire to share ideas and learn from one another all contributed to the success of Maui District's Title I effort. Projects during the past academic year were more organized, more effective, and of more help to the pupils than they were during the 1972-1973 academic year.

PUPIL ELIGIBILITY , SELECTION & IDENTITY

Of the 256 Title I pupils participating in the reading resource rooms, 72% of them were boys and 28% were girls. The achievement attained by both groups was .16 grade level per month for males and .12 for the females. Although the boys achieved four-tenths of a year more than the girls, the difference was insufficient to establish specific conclusions regarding either the instruction or emphasis given to them.

More significant than the gains achieved by the two sexes was the fact that the projects had selected considerably more boys than girls. One hundred more boys were participating in the Title I projects than were girls. Their baseline learning rates, however, were identical, with .07 average monthly gain for the females and the males. The most probable explanation for the greater number of boys having been selected as Title I participants was that they may have been more frequently "referred" to the project teacher as "special cases" which needed "extra help" from additional school personnel. Extreme caution should be exercised into accepting pupils for Title I programs on the basis of such subjective referral.

The primary reason that more boys than girls were selected may have been that they were referred more often by the classroom teachers, and largely because of the pupils' misbehavior in class. Pupils with behavioral problems generally tend to be males, while girls who are equally underachieving do not as frequently exhibit inappropriate behaviors. Classroom behavior, however, is not a Title I criterion for selection into reading projects. All pupils should be selected only on the basis of quantitative and objective test data, and not from the teacher's subjective opinion, such as "the pupil is too active, has a short attention span, and I can't work with him."

Upon referral, potential pupils might be pre-tested - with a standard instrument such as the PIAT, ranked according to percentile scores; and selected on the sole basis of their academic achievement status within the school. All schools are well represented by the excellent special education services program of Maui District. Problem oriented youngsters with difficulties in addition to academic achievement should logically be referred to this program. This does not imply that unmotivated pupils with behavioral problems should not be considered by the Title I program. Where appropriate learning and structured instruction are essential, particularly in reading skills, referral to the Title I project may be the best option available for the youngsters.

Since referral to any out-of-the ordinary instructional program can imply a negative stigma upon the pupils' self-image, caution should also be exercised in identifying the reading resource room as the "remedial reading" class. This negative stigma and labeling can further be reduced if the project teacher can devote increasing amounts of time, when and where appropriate, providing follow-through instruction with the target pupils in the regular classroom placement. This, in addition to helping the target pupils maintaining their identities in the classroom mainstream, will enable other non-Title I pupils to perceive the reading teacher as a "special helper" to their regular teacher.

RECOMMENDATION #1: Screening and selection of pupils for the ESEA Title I projects should be based primarily on academic deficiency and not solely on behavioral deviency.

RECOMMENDATION #2: Care should be exercised in establishing negative labels or stigma for pupils who are referred to the reading resource rooms.

RECOMMENDATION #3: Follow-through instructional services should be carried into the target pupils' regular classroom placement.

STANDARDIZING ACHIEVEMENT MEASURING INSTRUMENTS

The uniform adoption of the PIAT test instrument throughout Maui District during the 1973-1974 academic year is commendable. The objective and consistent measurement of pupil achievement which this test provided should be continued throughout the coming years. Use of an objective and individually administered test among all projects, however, does not guarantee accurate test administration or equally reliable scores from all projects. No test is valid unless it is used properly, and no scores are reliable unless they are objectively and impartially recorded. Further attention and emphasis ought to be given to the accuracy of test administration, and to the recording and reporting of the data that arises from it. Test results must be an unbiased measure of each pupil's achievement.

To enable the establishment of a more refined and responsive individualized instructional program, the use of more consistent and reliable diagnostic and placement instruments should be considered. No project was observed using such systematic procedures. Many fine commercially prepared diagnostic and placement materials are available on the current market. The use of validated diagnostic and placement instruments can verify the reliability of achievement test results which are questionable. Further, although diagnostic and placement test results do not have to be considered for program evaluation purposes, its availability and use will enhance proper instructional prescriptions and placement.

Remedial instruction, by its very nature of the varying degrees of achievement among the pupils being taught, requires individualized instruction. In order that precise individualization of instruction can be maintained, there must be constant - daily and/or weekly - assessments of each pupils' progress to the prescribed instructional program. No consistent and standardized progress checking system was noted among any of the Maui District ESEA Title I projects. Serious consideration should be directed towards the development and adoption of a uniform heirarchy of instructional objectives for reading skills (or other appropriate academic skills) and appropriate classroom behavioral skills.

Criterion referenced tests accompanying such objectives have the advantage of 1) permitting direct interpretation of progress in terms of specified behavioral objectives; 2) facilitate individualized instruction on a consistent and systematic basis; 3) eliminate a situation where half or more of Maui's school children must always be below the median; 4) enable teachers to check on student progress at regular intervals; 5) eliminate pressures on teachers to "teach to the test" in order to have the pupils make a good showing; 6) enable teachers to compile a comprehensive record of the pupils' development and clearly identify additional instruction required.

Since non-academic classroom behavioral objectives are unique to each locale, school and classroom, a hierarchy of such objectives should be developed individually by each project in concert with the general classroom expectations of teachers at the various schools. The availability of a heirarchy of non-academic classroom behavioral objectives will enable consistency among teachers to help children learn behavioral skills consistently and systematically.

RECOMMENDATION #4: Refine testing procedures for academic achievement test, i.e., PIAT, to improve the reliability of such results.

RECOMMENDATION #5: Identify and utilize valid diagnostic and placement tests to improve individualization of instruction and help validate achievement test results.

RECOMMENDATION #6: Seriously consider development and/or adoption of a hierarchy of reading skills objectives with accompanying criterion referenced tests (CRT) as an alternative achievement, diagnostic and placement test instrument.

LEISURE & ENRICHMENT READINGS

Commensurate with the development of reading skills and the application and practice of the skills is relevant recreational and/or interest reading. The various reading projects attempted to measure changes in non-instructional reading by recording the number of books read by each pupil - such counts being taken during the fall and again in the spring and the results compared. As the results indicated, a lack of clarity in the monitoring procedures resulted in unreliable scores.

In order that a more efficient monitoring system can be implemented for leisure and enrichment reading accomplishments by the Title I pupils, it is suggested that the reading teachers, in concert with their respective school librarians, develop graded lists of book titles. The list can include books which are or are not currently available at the school. Among the various criteria to be established for the preparation of such lists should be 1) the interest group targeted; 2) level of difficulty - decoding and/or comprehension; and 3) whether or not the book is accompanied by supplementary media presentations (filmstrips, tapes, records, etc.).

The task can be more conveniently performed and less duplicated if the various participants will divide the types/levels of books by publishers, etc., and a list exchange system be instituted and shared with all participants of the effort.

RECOMMENDATION #7: Establish a graded list of book titles for implementation of a systematic leisure-enrichment reading program.

TEACHER EFFECTIVENESS: EXPERIENCE & TRAINING

Three years ago, one of the principal concerns of the Maui District ESEA Title I program was the relatively high turn-over in staff (project-teachers) from year to year. The lack of any stabilized pattern in teacher assignments (except for two or three projects) resulted in generally poor outcomes of academic achievement scores among the target pupils. Since the 1971-1971 school year, the District's Title I staff assignments have remained stable with the exception of two or three projects. In essence, the pattern was reversed and staff attrition was no longer a problem. In-service training opportunities were offered and the general skills and experiences of the personnel were upgraded. The projects began to show gradual improvement and the achievement scores, on a district-wide basis, began to improve.

Staff turn-overs at the various schools are expected to continue, particularly in light of the current situation where decreasing enrollments or population shifts require adjustments to the school staffing patterns. The mere fact that a new teacher is assigned to teach reading in a Title I project does not imply that the project will be less successful. Neither does this mean that the assignment of an experienced and well-trained teacher will guarantee academic successes. All new Title I reading teachers can be inspired and motivated towards greater experiences with concomitant training that will assure them of greater successes and results of their efforts. Continued stability of teaching assignments will enable this to occur, although some changes are anticipated for the 1974-1975 academic year.

RECOMMENDATION #8: Teacher assignments to ESEA Title I projects should be carefully screened and stabilized as much as possible. Experienced or inexperienced teachers should be afforded security in their assignments to enable them to make long-range plans regarding self-improvements as well as improvements to their projects.

RECOMMENDATION #9: Formal and informal training opportunities (including classroom visitations) should be continued and offered to all experienced and new teachers involved in the ESEA Title I programs. Training plans should also include inputs from the teachers.

MOTIVATION & LEARNING THEORY

It was noted that most of the reading resource room projects in the Maui District featured - to varying degrees - some aspect of positive reinforcement for desirable classroom behaviors and/or academic achievement. This effort is praiseworthy and indicates the project teachers' general understanding and acceptance of the significance of positive consequences to learning objectives - academic or non-academic.

Careful observation among the various projects indicates, however, an undue amount of emphasis on tangible or object reinforcers such as edible treats, trinkets or toys and tokens/points continued throughout the entire year. While it is often very necessary to begin dispensing tangible rewards, to make positive reinforcers meaningful, it is crucial to the natural development and social growth of each learner that equal emphasis be placed on social reinforcers, such as teacher praise and peer recognition.

This can be done by pairing social reinforcement with the dispensing of tangible rewards - gradually diminishing the frequency of tangible rewards.

The immediate dispensing of positive consequences is often as equally crucial as the appropriateness of the rewards. Underachieving children often exhibit lack of motivation merely because they are - at a given point in time - unable to forsee the gratification which comes from successful accomplishment.

Another area of concern to be considered is the proper designation of behavioral objectives. Care should be exercised to recognize learning accomplishments rather than mere compliance or conformity to teacher expectations. Behaviors which are to be modeled or shaped and positively reinforced should be for the "good" of the learner rather than for the benefit or convenience of the teacher.

Finally, more systematic effort should be directed towards "catching the child being good" rather than "catching him being bad". Both teachers and EAs should constantly recognize and praise children who are on-task rather than ignore such desirable traits and attend to their misbehaviors.

RECOMMENDATION #10: Provide immediate and meaningful positive reinforcements for desirable task accomplishments. "Catch the child being good."

RECOMMENDATION #11: Pair tangible rewards with social reinforcements and diminish its frequency. Use "natural" consequences increasingly and to greater advantage.

RECOMMENDATION #12: Reinforce behaviors that are beneficial to the learner rather than convenience to the teacher.

PEER TUTORING: A TEACHING STRATEGY

An analysis among the results of various successful and lesser successful tutoring projects elsewhere reveal that the more effective and productive tutorial projects had four common characteristics. These were a) simplicity in organization: tutoring in one subject area, in one place, and during a specific and consistent time of the day was more effective; b) appropriate ability levels of tutor and tutee: the tutors' ability was not significantly more (or less) than three grade levels above the tutees' for mutual learning to occur; c) positive reinforcement for achievement: as tutoring was entirely voluntary by the pupil, the accomplishments flourished when social praise, teacher recognition, or certificates of achievement was given; and d) relatively close supervision by a teacher: the pupils' meeting, sitting, and talking together did not automatically imply that a tutorial and mutually helpful relationship had been established.

Through implementation of a tutorial component under the direction of reading resource personnel, the pupils will learn more academically, increase their self-confidence, and allow extra time for the project teacher to further diagnose, prescribe, and individualize pupil instruction. When other non-Title I pupils are included as tutors or tutees, the negative stigma usually associated with special classrooms will diminish.

RECOMMENDATION #13: Consider incorporation of peer-tutor activities as an integral function of the reading resource room.

PRESCHOOL FOCUS

The Maui District ESEA Title I preschool projects have been indeed fortùnate to be staffed by competent and concerned professional teachers. The measured results of all three projects have been significantly high.

There appears to be, however, some lack of clarity of the focus and direction of preschool curricula. The stated and implied emphasis seem to indicate that while some are more inclined to be concerned with the affective domain, the others have been concentrating on cognitive skills.

Since the children ultimately enter the same educational system, it is in order that some clarifications in goals and objectives be agreed upon. Parents should be actively involved in such discussions and the Curriculum Guide For Early Childhood Education: Ages 3-8 with Emphasis on Ages 3-5, prepared by the DOE, should be presented as a basis by which the standards are established.

The subsequent development of specific goals and objectives which are observable and measurable will enhance the development of better sequence and content of instruction. It is then that adequate preschool preparation can trully begin to reduce the gap between educationally advantaged and disadvantaged pupils of the schools. Consideration might also be given to the incorporation of the Preschool Basic Skills Checklist into a continua of affective and cognitive learning objectives.

RECOMMENDATION #14: Clarify focus and directions of preschool instruction. Establish goals and objectives which are observable and measurable.

RECOMMENDATION #15: Identify and prepare a continua of preschool learning objectives.

PARENT INVOLVEMENT

Parental involvement within the Title I projects (except the Hana Preschool Project) was generally not significantly sufficient to affect the program outcome or increased pupil achievement. While the schools' principals, project teachers, and educational assistants were aware of the need and ultimate value of parental involvement, and strived to interest them in the programs, many expressed frustrations in their attempts to elicit the broader participation of the parents.

Several parent involvement meetings were conducted during the year by the Maui District Office. While these meetings were attended by concerned parents, they did not - and could not - represent the nearly 300 parents of Title I children in the district. Yet the effort by the District Office, principals, project teachers, and some concerned parents to help more parents become concerned and be a positive influence in their children's educational endeavor was commendable. Even with such a tremendous task, the District's parental meetings, planning, organization, and communication with parents was somewhat successful. With the special help of project teachers during the coming school year the involvement of parents within each project should continue to increase.

All parents want to see their children succeed in learning. Since so many of the Title I pupils in Maui District achieved academic successes, this information, if conveyed to them in a personal and positive manner, will eventually and naturally result in positive responses by them. Positive feedback to parents must be frequent (weekly), immediate, in small dosages, and consistent. The parents of approximately 300 pupils can regularly be contacted by the Title I personnel. This is a small investment of time when it is compared to the high dividends it will pay to the community, the school, the family, and most important of all, the individual pupil.

RECOMMENDATION #16: Continue to exert all efforts to elicit parental involvement in their children's school affairs and particularly the ESEA Title I programs offered.

OUTCOMES OF PREVIOUS RECOMMENDATIONS

Recommendations and suggestions made to the Maui District Office - Compensatory Education Section, during previous evaluation efforts have been well received and acted upon. A number of recommendations presented in the 1972-1973 Evaluation of Project Components and the 1973-1974 Mid-Year Progress Report, in particular, have been incorporated by the schools and/or the District Office.

1. A systematic approach to reading instruction be instituted among reading projects: Although this was a broad and general recommendation, the project teachers have shown evidences that their reading instruction programs are moving towards this goal. A more noticeable trend should begin to emerge during the 1974-1975 school year as all reading projects begin refining their instructional systems.

2. Induce greater parent involvement: Initial steps in eliciting parental responses have been taken by a number of reading and preschool teachers. This involves the positive reinforcement principle of "immediate feedback". Teachers have begun to send home positive notes to parents of children who make small achievements in the classroom: A systematic and consistent application of this simple technique should, in ensuing years, become a routine function.

3. Establish priority for remedial programs: As demonstrated by the relocation, to more adequate facilities, of a number of reading and

preschool projects, it appears that "compensatory education" is truly recognized as an integral part of the school program in Maui District.

4. Secure help to consolidate the preparation of annual project proposals: The 1974-1975 ESEA Title I project proposals were consolidated into two specific documents - one for the preschool projects and the other for reading projects. Sufficient organizational and programmatic designs were incorporated to assure appropriate "fit" to the particular needs of the participating schools.

5. Standardization of test instruments and data collection system: In cooperation with the program evaluators, a standardized testing and data collection system was implemented. All projects - reading as well as preschool - administered the recommended achievement tests to measure appropriate academic skills. Standardized reporting forms were utilized for reporting supplementary data regarding the Title I projects.

6. Staff training opportunities: Despite the severe handicaps of limited funds, it is indicated that every effort is being devoted toward providing in-service and out-service training opportunities for the Title I personnel of Maui District. This is highly commendable.

7. Testing accuracy and reporting of data: With the standardization and improvements in testing and data reporting procedures (see item #5, above) test results have become more accurate, reliable and prompt. Continued efforts at improvement will lead to greater accuracy and reliability of the reported data, which in turn, enhances precise analysis and evaluation.

APPENDIX

Maui District Title I Personnel

Haiku School
Principal - Tetsuo Kanemitsu
Reading Teacher - Patricia Maielua

Hana High & Elem. School
Principal - Wallace Fujii
Preschool Teacher - Gwen Adams
EA - Vivian Kamai

Kaunakakai Elem. School
Principal - Edward Kashiwamura
Reading Teacher - Susan Tarumoto

Kihei School
Principal - Tony Arakaki
Reading Teacher - Merle Sado

Kilohana Elem. School
Principal - Ronald Kula
Reading Teacher - Aina Weight
Counselor - Phillip Iha

Kula School
Principal - Kunio Kobayashi
Reading Teacher - Satoe Kunioki

Lanai High & Elem. School
Principal - Howard Sakamoto
Preschool Teacher - Amy Shiroma
EA - Marion Honda

Paia School
Principal - Osamu Kawakami
Reading Teacher - Sandra Wainui

Puunene School
Principal - Masami Hironaka
Preschool Teacher - Sharon Nogami
EA - Anna Saki

Waihee School
Principal - Donald Shishido
Reading Teacher - Rena Matsunaga

Wailuku Elem. School
Principal - Susumu Matoi
Reading Teacher - Martha Fukunaga
EA - Lin Chun Wong